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Preliminary Report

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PRELIMINARY REPORT

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EXECUTIVE SUMMARY

The aging of the population is one of the most significant socio-demographic changes to occur in Canada since the post-war baby boom. Projections suggest that by the end of this century the proportion of the Canadian population aged 65 and older will increase by more than 60%. One institution which will be strained by this change is the health-care system. For this reason, any behaviours which promote poor physical or emotional health during this stage of the life-cycle are of special interest. One constellation of such behaviours is the problematic use of alcohol and other substances. While alcohol problems decline during the latter stages of the life-cycle, they still remain one of the more common problems experienced by older adults. Indeed, among males aged 65 or older, alcohol dependence is the third most frequently experienced disorder preceded only by severe cognitive impairment and phobia. Moreover, the combination of life-cycle changes together with alcohol and other drug use may put older adults at risk. Psychologically, they are more likely to experience social isolation, negative life-events (such as the loss of significant others), and important role transitions. Physiologically, they are more sensitive to alcohol because of their low body mass and the ingestion of other prescribed drugs.

This report examines the use of alcohol and other drugs and their association with health and well-being among older adults residing in senior citizen housing units. The aim of this study is threefold: first, to estimate the prevalence and level of alcohol and drug use among this population; second, to examine the relationship between well-being and drug use; and third, to examine the validity and reliability of questions relating to alcohol use, drug use and well-being.

METHODS

The target population comprised adults aged 60 years and over who resided in publicly, privately or co-operatively financed senior citizen apartments within Metropolitan Toronto in June of 1987. This included about 15,400 apartment suites from 75 buildings and represented 5% of all Metropolitan Toronto residents aged 60 years and over.

A stratified two-stage cluster sample design was employed to select an initial sample of 500 apartment suites. In the first stage, two apartment buildings were randomly selected within each stratum. Buildings with more apartments were given a

greater chance of selection (i.e., probability proportional to size). Of the 75 buildings in the population, 10 (2 per stratum) were randomly selected. In the final stage, suites (clusters) within each selected building were randomly selected with equal probability. Of the 500 suites initially selected, 320 (64%) participated, from which 349 individuals were interviewed between June and October, 1987.

Respondents ranged in age from 60 to 100 years (average=74 years); two-thirds (69%) were female. Just over half, 52%, were widowed, while 21% were married, 13% single, and 14% separated or divorced. Most fell within the lower end of the socioeconomic scale; almost half (45%) did not attend secondary school; most (96%) were not employed and had a household income of less than $10,000 annually (75%). In addition, the sample was ethnically diverse: 63% were born outside Canada; 41% were bilingual. Among those born outside Canada, 32% were born in the British Isles, 21% in China, 13% in "other countries", 11% in Eastern Europe, 6% in Western Europe, 6% in other Asian countries, 6% in West India, and 5% in East India. Compared to those aged 60 years or over living in the general population, this sample differed in the following ways: (1) respondents were significantly older; (2) a greater percentage were female; (3) they were more likely to be widowed, divorced or separated; (4) there were more Protestants and members of 'other' religions and fewer of the Jewish faith; (5) they had less formal education; (6) they were less likely to be employed; and (7) they reported less income.

HIGHLIGHTS

Two groups, males and those aged 60 to 65 years, were the most likely to report lower levels of well-being. Males, in contrast to females, reported the following:

- less happiness
- greater negative life-events
- lower social support
- lower social activity
- lower social fulfillment
- greater loneliness.

Those aged 60 to 65 years, in contrast to other age groups, were the most likely to report the following:

- poorer health
- less life satisfaction
- less positive feelings

- greater negative life-events
- lower social support.

Greater <u>alcohol</u> <u>intake</u> was associated with

- being male
- lower social fulfillment
- greater mastery
- greater negative life-events
- greater negative feelings.

Greater <u>alcohol</u> <u>problems</u> were associated with

- being male
- being aged 60 to 65 years
- lower social fulfillment
- greater mastery
- lower social support
- greater negative life-events.

Greater <u>medical</u> <u>drug</u> <u>use</u> was associated with

- being younger for tranquillizer use
- being female for heart/blood medicine
- less life satisfaction for use of tranquillizers and sleeping pills
- less happiness for use of sleeping pill and heart/blood medicine, and
- greater negative feelings for use of pain relievers, tranquillizers, sleeping pills and heart/blood medicine.

Negative life-events, the most prominent factor, showed a positive relationship to alcohol intake, drinking five or more drinks at a single sitting, alcohol problems and the use of analgesics, tranquillizers, sleeping pills and heart/blood medicine. Following life-events, ratings of overall health showed a positive relationship to frequency of alcohol use and a negative one to the use of analgesics, sleeping pills and heart/blood medicine. The associations of the remaining well-being variables were differentially related to type of drug use. Social fulfillment, mastery and social support were significantly related to use of alcohol and to problems, but not to the use of medical substances.

IMPLICATIONS

These preliminary findings raise a number of issues. First, with the exception of two subgroups, males and those aged 60 to 65 years, respondents reported functional

levels of well-being. This finding is consistent with studies that suggest age-segregated environments promote a greater sense of well-being. There is also evidence to suggest that many living in multigenerational households are older and more functionally impaired than those living in other household types. Still, it is unclear whether healthier individuals are drawn to elderly residential environments or whether it is the environment which promotes well-being.

A second issue centers on alcohol use and problems among this population, particularly in contrast to their counterparts living in the general population and as well in contrast to younger adults. Although respondents in our sample were less likely to report drinking, rates of alcohol problems did not differ dramatically from those living in a single household environment. Clearly, among older adults it is the youngest group, and especially males, that are at risk for alcohol and other health related problems. As well, regardless of age, gender plays an important role in the use of alcohol.

The purpose of this report was to present preliminary descriptive information. We must still examine whether less well-being and greater alcohol use among males and among the youngest adults still hold after controlling for other demographic and psychological factors. We must also direct future work towards examining more closely the role of ethnicity and environmental or community differences in health and drug use, and the impact of role transition from work to retirement. For these reasons our findings are preliminary until their stability can be demonstrated.

The most obvious social policy implication centers on the growing numbers of older adults in the population. More attention must be directed to this impact on current and future public health needs. We cannot assume that drinking among currently middle-aged adults will necessarily decline with age as it has in the past. However, even if this maturational decline is found to be independent of cohort and historical influences, due to the increasing size of the population base, there will likely be increases in the absolute numbers requiring treatment or other interventions.

SOMMAIRE EXÉCUTIF

Depuis le "baby boom" qui a suivi la deuxième guerre mondiale, un changement sociodémographique des plus importants au Canada a été le vieillissement de la population. On peut deviner qu'à la fin du siècle la proportion de la population canadienne âgée de 65 ans et plus aura augmenté de plus de 60%. Le système des soins de la santé publique sera bien affecté par ce changement. C'est pour cela que des comportements qui peuvent nuire à la santé physique ou émotionnelle pendant la vieillesse sont maintenant d'un grand intérêt. Un exemple d'un tel comportement est celui de l'abus de l'alcool et d'autres drogues. Bien que les problèmes reliés à l'alcool diminuent pendant la vieillesse, ils continuent néanmoins à être assez communs parmi les adultes âgés. Au fait, parmi les hommes de 65 ans et plus, la dépendance sur l'alcool est le désordre ressenti le plus souvent après ceux de la détérioration de la cognition et la phobie. D'ailleurs, les changements dûs au cycle de la vie en combinaison avec l'usage de l'alcool et d'autres drogues peuvent être très dangereux pour les vieux. Du point de vue psychologique, ils risquent de ressentir l'isolement social, certains événements négatifs (comme, par exemple, la perte des bien aimés), et des transitions de rôle. Du point de vue physiologique, ils sont sensibles à l'alcool à cause d'une masse de corps basse et aux effets d'autres drogues prises sur ordonnance.

Dans cette étude on examine l'usage de l'alcool et d'autres drogues et son association avec la santé et le bien-être des vieux qui vivent dans des résidences pour les gens âgés. L'étude a trois buts: le premier, d'estimer la fréquence et le niveau de l'usage de l'alcool et d'autres drogues dans cette population; le deuxième, d'examiner la relation entre le bien-être et l'usage des drogues; et le troisième, de déterminer la validité et la qualité des questions sur le bien-être et l'usage de l'alcool et de la drogue.

MÉTHODES

La population cible consistait en des adultes de 60 ans et plus qui vivent dans des résidences pour les gens âgés financées publiquement, en privé ou coopérativement à la métropole de Toronto en juin de 1987. Ci-inclus étaient à peu près 15,400 appartements de 75 immeubles – le logement de 5% de tous les habitants torontois âgés de 60 ans et plus.

On a utilisé un dessein d'échantillon stratifié et rassemblé, en deux étapes, pour sélectionner l'échantillon original de 500 appartements. Dans le premier étape, on a

choisi au hasard deux immeubles dans chaque stratum. Des immeubles avec une plus grande quantité d'appartements ont eu une plus grande probabilité de sélection. Des 75 immeubles de la population. 10 (2 pour stratum) ont été choisis au hasard. A l'étape final, des suites (des rassemblements) dans chaque immeuble sélectionné ont été choisies au hasard avec une probabilité égale. Des 500 suites sélectionnées au début, 320 (64%) ont participé desquelles 349 personnes ont donné des entrevues entre juin et octobre, 1987.

L'âge de ceux qui ont répondu allait de 60 à 100 ans (moyen = 74 ans); deux-tiers (69%) étaient des femmes. Un peu plus de la moitié (52%) étaient veufs; 21%, mariés; 13%, célibataires; et 14%, séparés ou divorcés. La plupart appartenait au niveau socioéconomique bas; presque la moitié (45%) ne sont pas allés à l'école secondaire; la plupart (96%) était sans travail et gagnait moins de $10,000 par an (75%). Il y avait une diversité éthnique: 63% sont nés dehors du Canada; 41% étaient bilingues. Parmi ceux qui sont nés dehors du Canada, 32% sont nés aux Iles Britanniques; 21%, en Chine; 13%, dans "d'autres pays," 11%, en Europe de l'est; 6%, en Europe de l'ouest; 6%, dans d'autres pays asiatiques; 6% en Inde de l'ouest, et 5% en Inde de l'est. En comparaison avec ceux de 60 ans et plus dans la population générale, cet échantillon avait les charactéristiques suivants qui les distinguaient: (1) ils étaient beaucoup plus vieux; (2) il y avait un plus grand pourcentage de femmes; (3) il y avait plus de veufs, divorcés et séparés; (4) il y avait plus de protestants et membres "d'autres" religions et moins de juifs, (5) ils ont eu moins d'éducation officielle; (6) ils avaient moins souvent du travail; et (7) ils ont eu moins de revenu.

RÉSULTATS INTÉRESSANTS

Un sens de bien-être a manqué surtout à deux groupes: les hommes et les personnes âgées de 60 à 65 ans. Les hommes, en contraste avec les femmes, ont rapporté le suivant:

- moins de bonheur
- plus d'événements négatifs dans la vie
- moins de soutien social
- moins d'activité sociale
- moins de satisfaction sociale
- plus de solitude.

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Ceux de 60 à 65 ans, en contraste avec ceux d'autres âges, ont indiqué le suivant:

- mauvaise santé
- moins de satisfaction dans la vie
- moins d'émotions positives
- plus d'événements négatifs dans la vie
- moins de soutien social.

Une plus grande consommation d'alcool s'associait avec:

- le genre masculin
- moins de satisfaction sociale
- plus de maîtrise
- moins de soutien social
- plus d'événements négatifs dans la vie.

Plus de problèmes avec l'alcool s'associaient avec:

- le genre masculin
- l'âge de 60 à 65 ans
- moins de satisfaction sociale
- plus de maîtrise
- moins de soutien social
- plus d'événements négatifs dans la vie.

Un usage élevé de drogues médicales s'associait avec:

- un âge plus jeune, pour l'usage des tranquillisants
- le genre féminin, pour les médicaments pour le coeur ou le sang
- moins de satisfaction dans la vie, pour l'usage des tranquillisants et des somnifères
- moins de bonheur, pour l'usage des somnifères et des médicaments pour le coeur ou le sang, et
- plus d'émotions négatives, pour l'usage des analgésiques, tranquillisants, somnifères et médicaments pour le coeur ou le sang.

Des événements négatifs dans la vie, le facteur le plus important, s'associaient d'une manière positive avec la consommation d'alcool, l'habitude de prendre cinq coups ou plus à la fois, des problèmes avec l'alcool et l'usage des analgésiques, tranquillisants, somnifères et médicaments pour le coeur ou le sang. L'estimation de la santé générale s'associait d'une façon positive avec la fréquence de l'usage de l'alcool et d'une façon négative avec l'usage des analgésiques, somnifères et médicaments pour le coeur ou le

sang. Les autres variables du bien-être s'associaient d'une manière différentielle avec la sorte d'usage de la drogue. La satisfaction sociale, la maîtrise et le soutien social s'associaient d'une façon importante avec l'usage de l'alcool et avec des problèmes reliés à l'alcool mais pas avec l'usage des médicaments.

IMPLICATIONS

Ces résultats préliminaires suggèrent plusieurs choses. D'abord, à l'exception de deux sous-groupes (les hommes et toutes les personnes âgées de 60 à 65 ans), ceux qui ont répondu ont indiqué des niveaux acceptables du bien-être. Il y a aussi de l'évidence pour suggérer que beaucoup de personnes qui habitent dans des maisons avec plusieurs générations sont plus âgées et plus détériorées du point de vue fonctionnel que celles qui habitent dans d'autres sortes de maison. Cependant il n'est pas clair si les individus d'une meilleure santé ont tendance à habiter dans des résidences pour les gens âgés, ou si c'est de telles résidences elles-mêmes qui encouragent le bien-être.

Il y a aussi la question de l'usage de l'alcool et des problèmes causés par l'alcool dans cette population, surtout en contraste avec leurs homologues dans la population générale et en contraste avec les adultes plus jeunes. Bien que nos sujets aient rapporté un plus petit taux de boire, leurs taux de problèmes causés par l'alcool ne différaient pas énormément de ceux rapportés par les personnes d'une maison particulière. Evidemment parmi les adultes plus âgés, c'est les plus jeunes, et surtout les hommes, qui risquent d'encontrer des problèmes avec l'alcool ou d'autre problèmes de santé. En plus, sans regarder l'âge, le genre joue un rôle important dans l'usage de l'alcool.

Les résultats de cette étude sont préliminaires et descriptifs. Il faut toujours examiner si moins de bien-être et plus d'usage d'alcool parmi les hommes et parmi les adultes les plus jeunes continuent après avoir rendu compte d'autres facteurs démographiques et psychologiques. Il faudra aussi voir de plus près le rôle de l'origine éthnique et des différences des environs et de la communauté quant à la santé et à l'usage de la drogue, et l'effet de la transition du rôle du travail à celui de la retraite.

En ce qui concerne la politique sociale, l'augmentation du nombre des adultes plus âgés dans la population est très importante. Il faut bien faire attention aux effets de cette augmentation relativement aux besoins de la santé publique dans le présent et à l'avenir. On ne sait pas si l'habitude de prendre les boissons alcooliques parmi les adultes qui sont maintenant entre deux âges va diminuer forcément avec le temps comme dans le passé. Toutefois si elle diminue, malgré les influences de l'histoire et de la

cohorte, il y aura quand même sans doute plus de gens (en fonction de nombres absolus) qui auront besoin du traitement ou d'autres interventions, simplement à cause de l'accroissement de la population des vieux.

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1. Introduction*

The aging of the population is one of the most significant socio-demographic changes to occur in Canada since the post-war baby boom. Between 1974 and 1983, the population aged 60 or over has increased by 19% (Denton et al., 1987). Projections suggest that by the end of this century the proportion of the Canadian population aged 65 and older will increase by more than 60%, from 9.7% in 1981 to between 12.8% and 13.6% by 2001, and to between 19.5% and 29.1% by 2051 (Denton et al., 1987).[1]

One institution which will be affected by this change is the health-care system. For this reason, any behaviours which promote poor physical or emotional health during this stage of the life-cycle are of special interest. One constellation of such behaviours is the problematic use of alcohol and other substances. While alcohol problems decline during the latter stages of the life-cycle (Smart & Liban, 1981; Borgatta et al., 1982) they still remain one of the more common problems experienced by older adults. Indeed, among males aged 65 or older, alcohol dependence is the third most frequently experienced disorder preceded only by severe cognitive impairment and phobia (Myers et al., 1984).

Moreover, the combination of life-cycle changes together with alcohol and other drug use may put older adults at risk (Gomberg, 1980; Mishara & Kastenbaum, 1980; Brody, 1982). Psychologically, they are more likely to experience social isolation, negative life-events (such as the loss of significant others), and important role transitions. Physiologically, they are more sensitive to alcohol because of their low body mass and the ingestion of other prescribed drugs (Hartford & Samorajski, 1982; Schuckit & Pastor, 1978).

Epidemiological data show that although older adults are more often abstainers and less often heavy drinkers than their younger counterparts, (Cahalan et al., 1969; Barnes, 1979; Johnson & Goodrich, 1974; Maddox et al., 1984; Rathbone-McCuan et al., 1976; Douglass et al., 1988), they are just as likely to engage in daily drinking (Schuckit & Pastor, 1978). Similar findings have been noted among Ontario adults. Smart and Adlaf (1987) found that

while rates of abstention were higher for those aged 50 and older than for younger adults (30-49 years), both groups reported a similar level of daily drinking (21% versus 17%). Despite lower rates of use and problems than their younger counterparts, particular subgroups of older adults are prone to problem drinking (Borgatta et al., 1982; Cahalan, 1970).

Most notably, among older adults, males are more likely than females to consume alcohol and to drink heavily. (Smart and Adlaf, 1988; Sawka, 1978; Busby et al., 1988; Goodwin et al., 1987; Cohen, 1988; Barnes, 1979, 1982; Douglass et al.. 1988). As in the general population, consumption declines with age (Smart and Adlaf, 1988; Busby et al., 1988; Goodwin et al., 1987; Barnes, 1982). Thus, it is the youngest group of older adults who appear to be at greatest risk.

Data on the use of medical drugs suggest that use increases with age (Helling et al., 1987; Guttman, 1978), and that daily and extended use are more prevalent among older people than among their younger counterparts (Peterson, 1983). For example, Smart and Adlaf (1987) found that those aged 50 and older, especially females, were more likely to report daily use of sleeping pills than 30-49-year-olds and 18-29-year-olds, and in addition were more likely to report daily use of tranquillizers. Prescription data from Saskatchewan (D'Arcy, 1987) similarly show use of mood-modifying drugs (i.e., sleeping preparations, tranquillizers and analgesics) to increase with age (rates of use were highest among those 75 years and older). These data also showed greater use among females than males. National data support these findings. The Canada Health Survey (CHS) (Health and Welfare Canada, 1981)[2] found increases in use with age for pain relievers, tranquillizers or sleeping preparations and heart or blood medication and among older adults, greater prevalence of use for females.

In this report, we examine the use of alcohol and other drugs and their association with health and well-being among older adults residing in senior citizen housing units. The aim of this study is threefold: first, to estimate the prevalence and level of alcohol and drug use among this population; second, to examine the relationship between well-being and drug use: and third, to examine the validity and reliability of questions relating to alcohol use, drug use, and well-being.

We will begin by outlining the methods and procedures used to select the sample and to collect the data. Next, we briefly report on the validity and reliability of questionnaire items and the characteristics and representativeness of participants. Our results will begin with a brief description of the reported health and well-being of respondents. We then describe the nature and extent of alcohol use and associated problems and other drug use, and then examine associations between well-being and drug use. In closing we highlight some of the important findings, discuss their implications, and suggest some future directions for research.

2. Method

2.1 Sample Design

The intended or target population from which we derived our sample comprised adults aged 60 years and over who resided in publicly, privately or co-operatively financed senior citizen apartments within Metropolitan Toronto in June of 1987. Apartment units not included were those where use of alcohol was banned, those which contained "mixed" units, or those which catered to specific ethnic groups.[3] In total, the target population included about 15,400 apartment suites from 75 buildings and represented 5% of all Metropolitan Toronto residents aged 60 years and over. For purposes of administrative control and to ensure regional representation, the population was stratified by five groupings (four representing locality and the fifth nonpublic residences). Of the 15,400 apartment suites in the population, 500 were selected, with each stratum proportionally represented. This initial allocation of 500 suites included an expected nonresponse factor of 65%.

A two-stage cluster sample design was employed to select apartment suites. In the first stage, two apartment buildings were randomly selected within each stratum. Buildings with more apartments were given a greater chance of selection (i.e., probability proportional to size). Of the 75 buildings in the population, 10 (2 per stratum) were randomly selected. In the final stage, suites (clusters) within each selected building were randomly selected with equal probability. All eligible residents within a suite were interviewed.[4] The sampling procedure resulted in self-weighted estimates.[5]

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2.2 Procedures & Administration

The management of each selected apartment building was informed about the study and was asked for permission to survey residents. All selected buildings participated. In most cases, the building management forwarded a letter to all residents informing them about the study. In addition, one week prior to the interview, each selected suite received a hand-delivered letter informing the occupants of their selection, outlining the nature of the study, and explaining that an interviewer would soon call on them. Because each building contained security systems for their residents, first contact with the respondent was made through an intercom system. Interviewers introduced themselves and asked occupants for their participation. Interviewers also informed occupants that they would receive a one dollar lottery ticket as a token of appreciation for their time and inconvenience. Upon receiving agreement of the occupants to participate, interviewers proceeded to the respondents suite to conduct the interview. A few interviews were conducted outside the respondent's suite at his or her request. Considerable effort was made to follow-up nonresponding units. All interviews were conducted between June and the end of October, 1987. The four interviewers employed were trained in both general interview techniques and the questionnaire specifically. All were young females, three of whom were chosen for their ability to speak and translate into another language relevant to the sample.[6] Data were collected by a personal interview which lasted, on average, 58 minutes and ranged in duration from 20 to 145 minutes.

2.3 Questionnaire Content

Several questionnaire items were used to determine the degree of current and past alcohol involvement. Areas of coverage included the prevalence, frequency, and quantity of consumption; drinking patterns; drinking history; reasons for drinking; and problem drinking as measured by the CAGE scale (Mayfield et al., 1974; Ewing, 1984).[7]

We also report data on the use of four drugs: pain relievers (analgesics); tranquillizers; sleeping preparations; and medicine for heart problems and blood pressure. For each substance, respondents were asked if they had used

it in the past 12 months, and if so, how frequently. In addition, they were asked whether use was by prescription, what quantity was prescribed and consumed. Information was collected for up to two drugs per substance category. In virtually all cases this information was recorded by the interviewer from medicine containers provided by respondents.

To examine the association between drug use and well-being, the questionnaire also included health and social measures of gerontological significance. For purposes of this report we consider "well-being" to reflect the generalization of three constellations: physical health; social-psychological well-being; and environmental- and structural-related factors.

To measure physical health status we utilized seven items drawn from the Multilevel Assessment Instrument (MAI) (Lawton et al., 1982). We used six of these to construct a total health status score. The remaining item, whether the respondent was in a wheelchair, was not included in the total score but is reported separately. The six items concern the following: 1) overall health; 2) the degree to which health problems interfere with activities; 3) whether or not the respondent has ever seen a doctor for heart trouble or 4) for circulation problems; 5) how many times the respondent visited a doctor; and 6) how many days have been spent in the hospital in the past year. Higher scores indicate better health with values range from 0 to 10.

Social-psychological well-being is represented by four measures: subjective well-being; mastery; loneliness; and social fulfillment.

To measure subjective well-being we employed Liang's (1985) integration of the Affect Balance Scale (Bradburn, 1969) and the Life Satisfaction Index A (Neugarten et al., 1961). This 15-item scale measures four constructs: 1) life satisfaction (congruence), a cognitive assessment of life satisfaction in terms of goals and expectations; 2) happiness, an emotional or cognitive assessment of overall long-term happiness or pleasure; 3) positive affect, current non-cognitive happiness or pleasure; and 4) negative affect, current non-cognitive unhappiness including anxiety, depression, worry, and pessimism. These measures are scored so that higher scores indicate less life satisfaction, happiness, and positive affect and greater negative affect.

The scale we employed to measure personal control or mastery was taken from Linn and Linn's (1984) Self-Evaluation of Life Function (SELF) Scale which closely follows Rotter's (1966) Locus of Control. Respondents were

asked how strongly they agree with the following statements: 1) becoming a success is a matter of hard work, luck has nothing to do with it, 2) what happens to me is my own doing, 3) most people don't realize the extent to which their lives are controlled by accidental happenings, and 4) many times I feel that I have little influence over the things that happen to me. Total scores ranged from 0 to 11 with higher scores indicating a greater sense of mastery.

Because older adults are more likely to experience the loss of a spouse and close friends, they may be more likely to experience feelings of loneliness. Indeed, some estimate that loneliness affects 12% to 40% of those aged 65 years or older (Creecy et al., 1985). To measure the degree to which respondents experience feelings of loneliness, we used a three-item scale employed by Creecy et al. (1985) (see also Paloutzian & Ellison, 1982). We asked respondents how frequently they felt 1) lonely, 2) that they had as many close relationships as they wanted, and 3) emotionally satisfied in their relationships with people. Total scores ranged from 0 to 6 with higher scores denoting less loneliness.

Loneliness, in turn, is connected to perceptions of one's social fulfillment. (Creecy et al., 1985). We measured social fulfillment using a three-item scale which indicated the degree to which respondents feel as if they 1) do not have enough friends, 2) do not have enough to keep busy, and 3) are not needed. Total scores ranged from 1 to 9 with higher scores indicating a stronger sense of self fulfillment.

Environmental-structural factors are represented by three measures: negative life-events; social support; and social activities.

Negative life-events have been linked to several health-related behaviours, including physical health (Lin et al., 1979), doctor visits (Krause, 1988), and alcohol consumption (Finney & Moos, 1984). To measure negative life-events we employed a 9-item scale based on the PERI life-events scale (Dohrenwend et al., 1978) previously used among older adults (Cohen et al., 1985). These items asked whether the individual has in the past year experienced 1) the death of a spouse; 2) the death of another family member; 3) movement to a worse home or neighborhood; 4) assault or robbery; 5) loss of one's drivers licence; 6) financial or property loss; 7) the death of a close friend; 8)

physical illness; and 9) injury. Total scores for these items ranged from 0 to 5 with higher scores indicating greater stress.

Social support, which is commonly seen as a mediator to stressors, has become a pivotal factor in social-gerontological studies. According to Weinberger et al.,(1986a) social support refers to relationships that fulfill basic social needs through the interaction with others. To measure social support we employed a five-item scale drawn from the MAI (Lawton et al., 1982) which asks about 1) the number of others with whom the respondent lives, 2) whether or not the respondent has someone to confide in, 3) whether or not there is anyone the respondent could depend upon if he or she became ill, 4) how often the respondent speaks to relatives on the telephone, and 5) how often the respondent visits with relatives. Total scores ranged from 0 to 9 with higher scores indicating greater social support.

Social activities are linked to happiness and life satisfaction (Creecy et al., 1985). To measure the level of social activity we used a four-item scale (Creecy et al.) which reflects how frequently respondents 1) participate in recreational activities or hobbies, 2) participate in clubs or community organizations, 3) socialize with friends, and 4) do volunteer work. Total scores ranged in values from 0 to 8, with higher scores indicating greater levels of social activity.

Appendix A presents the survey instrument while Appendix B presents a description of variables and their internal reliability.

2.4 Participation

Of the 500 suites initially selected, 320 (64%) participated, from which 349 individuals were interviewed. The most common reason for nonparticipation was refusal (67%), followed by language barrier (13%), not-at-home (12%) and current illness (8%). Nonparticipation can affect the representativeness of any survey sample if those who participate are systematically different from those not interviewed. To examine whether participants in our study differed from nonparticipants, interviewers attempted to record the gender and age of non-participants. Unfortunately, 66% of those who refused to be interviewed also refused to indicate their age. The refusal rate did not, however, differ

significantly by gender; 28% of males and 33% of females refused to participate.

Participation did vary significantly among buildings, ranging from 43% to 86%. As a result, we weighted the data according to building participation rate (to ensure the proportionality of the sample). This adjustment does not correct for nonresponse bias, but corrects the proportionality of the sample to its population.[8]

2.5 Data Analysis

This preliminary report restricts attention to univariate (frequencies) and selected bivariate (crosstabulations, correlations) relationships. Future reports and analyses will examine the multivariate aspects of these data in greater detail.

Since a major purpose of the study is to estimate particular health behaviours in this population we include estimates of sampling error for all total percentages. Sampling error refers to the "probable accuracy" or precision of an estimate. Total estimates summarized in this report include a range, or confidence interval, around percentage values, which indicate the interval within which the true population percentage probably lies. This error, however, does not include errors resulting from nonsampling sources, such as effects of poor memory, interviewer errors, and respondent errors. The confidence interval (in our case, a 95% confidence interval) can be interpreted as being 95% likely to include the true population value. In reporting that the percentage of older adults who rated their health as poor was 11.1% ± 3.3% (see Table 2), we mean that there is a 95% chance that the actual or true percentage of older adults in the population lies between 7.8% and 14.4%. Larger confidence intervals indicate less precision, while conversely, smaller intervals indicate more precision. Sampling errors for subgroup estimates can be derived from Appendix C.

Because sampling error is involved in any estimate, <u>absolute differences between two percentages do not necessarily reflect real differences</u>. For this reason, throughout this report we restrict the word "significant" to indicate statistically discernible differences at the .05 level of probability.

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2.6 Validity & Reliability

The sample survey method has many strengths including its ability to project information about a sample to a larger population. One possible weakness of the method, however, is its reliance on self-reported data. Such measures are evaluated in terms of their validity and reliability. Valid measures are ones that quantify the intended concept; reliable measures are ones that are consistent, stable and precise.

Reliability may be considered as the consistency of a respondent's report at a single point in time (internal consistency) or as stability across time (test-retest). To examine the test-retest reliability of responses, 43 respondents were re-interviewed after a three-week interval. This test-retest interview lasted from 10 to 20 minutes and contained 30 items examining demographic, physical and psychological health and alcohol and drug use.

The percentage responding consistently between the two interviews is shown in Column 1 in Appendix D. Consistency is generally high (average=75%; median= 85%), but varies by question (ranging from 24% to 100%). Column 2 shows the reliability coefficients, which indicate the extent of stability of a given question. For continuous variables (indicated by the absence of an asterisk) such as year of birth a coefficient of .60 or greater is considered reliable. For dichotomous variables (indicated by an asterisk) (e.g., yes-no) such as "cut down" coefficients (Kappa) of .75 or greater indicate excellent stability, and values between .40 and .75 suggest fair to good agreement (Fleiss, 1981). Overall, the data show good stability (mean=.65; median=.70). The highest reliability occurs for demographic items, the lowest being .99. Of particular interest to us here is the reliability of questions relating to alcohol and other drug use. Drinking variables all show acceptable reliabilities (ever drinking=.66; frequency of use=.95; frequency of drinking 5+=.84). With the exception of pain relievers, which shows a coefficient of .30, reliabilities for drug use items are also acceptable (ever smoking=.89; tranquillizers=.75; heart and blood medicine=.80; sleeping pills=.63). In total, six items show low stability (cut down, annoyed by others, pain relievers, stop use, feel bad, gone for help).

Although reliability is a necessary condition to show the validity of a measure, it is not a sufficient one. Any measure may be consistently

inaccurate or biased and thus invalid. There is not yet a strong consensus in the research literature as to the accuracy of self-reported measures among older adults. Although older adults appear to report some items more inaccurately than younger respondents (Cahalan, 1968; Schuman & Presser, 1981; Sudman & Bradburn, 1974; Andrews & Herzog, 1986), these effects have not been consistent (Rodgers & Herzog, 1987). Several studies have found that self-reported health of older adults is highly correlated with physician ratings (LaRue et al., 1979), disability and number of illnesses (Ferraro, 1980; Herzog & Dielman, 1985), and physician visits, hospitalization, diagnoses, medications and disability (Linn & Linn, 1980). Herzog & Dielman (1985) concluded that "reports of factual information by older adults are no more biased by inaccuracies than are those of respondents of other ages..." In addition, Andrews and Herzog (1986) found that responses from older respondents was less precise than those from younger ones, yet relationships among survey measures were not weakened. Regarding response behaviours, Herzog and Rodgers (1988) found that although older respondents (60 and older) did not show differences in the rate of "don't know" responses, or affirmative or extreme response styles compared to those aged 20 to 59, they did, however, require greater interviewer assistance for question stems and response categories.

Few empirical studies, despite sufficient grounds for concern (Graham, 1986), have examined the reliability and validity of self-reported alcohol and drug use among older adults. Although we present evidence of reliability, without other corroborative data, we are unable to establish the validity of these measures. Based on the research literature, however, we expect understated estimates of alcohol consumption and problems in this sample.

2.7 Sample Characteristics & Representativeness

The nature of any sample is a function of the target population. This is especially true in cases like ours where the population is small and unique i.e., residents of seniors' apartments. Sample characteristics are shown in Table 1. Respondents ranged in age from 60 to 100 years (average=74 years); two-thirds (69%) were female. Just over half, 52%, were widowed, while 21% were married, 13% single, and 14% separated or divorced. Most fell within the lower

end of the socioeconomic scale; almost half (45%) did not attend secondary school; most (96%) were not employed and had a household income of less than $10,000 annually (75%). In addition, the sample was ethnically diverse: 63% were born outside Canada; 41% were bilingual. Among those born outside Canada, 32% were born in the British Isles, 21% in China, 13% in "other countries", 11% in Eastern Europe, 6% in Western Europe, 6% in other Asian countries, 6% in West India, and 5% in East India.

It is also important to note the social location of this sample relative to other populations. Column 2 of Table 1 shows selected characteristics of 109 Metropolitan Toronto adults aged 60 years or over combined from Gallup surveys conducted in 1984 and 1987 (Smart & Adlaf, 1987). Compared to those aged 60 years or over living in the general population, our sample differed in the following ways: (1) respondents were significantly older; (2) a greater percentage were female; (3) they were more likely to be widowed, divorced or separated; (4) there were more Protestants and members of 'other' religions and fewer of the Jewish faith; (5) they had less formal education; (6) they were less likely to be employed; and (7) they reported less income.

Our sample also included more females and fewer married respondents than did a survey of 584 Edmonton residents aged 65 years and older (Sawka, 1978). The age distributions of this sample was, however, similar to ours (mean age=74.6). In addition, our study and the Edmonton one included respondents with a lower level of education and with a lower annual income. Other studies employing similar populations of older adults show comparable profiles. Among a sample of older adults living in public housing, Weinberger et al. (1986) obtained a sample with similar ages (mean age of 72 years) and gender (71% female).

3. Results

3.1 Health & Well-Being
3.1.1 Physical Health

As we see in Table 2, only a minority report poor health; 11.1% rate their health as poor while 18.1% feel that their health is a considerable barrier to activities. In a study of a similar population Weinburger et al.,

(1986b), found twice as many respondents reported poor health and that health was a barrier to activities.

Only one subgroup difference emerges for these data. Those in the youngest age group are most likely to rate their health as poor (21.9%), while those aged 76 or older are the least likely to do so (5.1%). Table 2 also shows physician visits and hospital days reported during the past 12 months. On average, respondents visited a physician 10.6 times per year; only 4.0% did not see a doctor. The majority (76.6%) spent no days in the hospital, with the sample averaging 4.2 days per year. We also see that males spent significantly more days in the hospital than did females (6.3 versus 3.3 days per year).

3.1.2 Subjective Well-being

Table 3 shows items and total scores for each of the four well-being dimensions. Beginning with life satisfaction, we find high levels of positive agreement to items, ranging from 64.2% to 84.4%. The dominant factor showing differences in life satisfaction is age. Those in the youngest age group are least satisfied: they are least likely to agree that they would not change their past life even if they could (40.5%), that they have got what they expected out of life (48.8%), and that they have got more of the breaks (58.2%). The total life satisfaction score also shows that those aged 60 to 65 years report the lowest level of satisfaction.

The three happiness items presented in Table 3 show that the majority agree that they are just as happy currently as they were in earlier times (64.2%) and that these are the best years of their lives (53.7%). Still, 52.0% feel their life could be happier. The only significant group difference shows that males are more likely to agree that their life could be happier than are females (65.8% versus 45.6%).

The four items measuring positive feelings (Table 3) show significant age differences for the total score and two individual items: those aged 76 or older are least likely to feel excited often; those aged 60 to 65 years are least likely to feel pleased. The total score shows that those aged 66 to 70 years report the lowest positive affect. Negative feelings are reported by a minority of respondents (Table 3). About one-third (32.0%) felt that "things were going

their way", while less than one-tenth felt very lonely (9.6%), bored (8.1%) or depressed (7.7%). No significant group differences emerge.

3.1.3 Mastery

Table 4 shows that most report high levels of self-perceived control or power over their environment. For example, 81.9% agree that what happens to them is their own doing; 72.0% agree that success is hard work, not luck. Still, 56.4% feel that they have little influence over things. No significant group differences are apparent.

3.1.4 Loneliness

Table 5, which presents measures of self-reported loneliness, shows that only a minority (9.2%) report such feelings. Clearly, the majority find both emotional satisfaction in their interactions with others (64.0%) and enough close relationships (52.8%). The only significant group difference shows that males are less likely than females to feel emotionally satisfied with their social relations (55.4% versus 67.9%).

3.1.5 Social Fulfillment

Between one-fifth to one-third express a lack of social fulfillment (Table 6). Just over one-quarter (27.3%) agree that they do not have enough friends while one fifth agree that they do not have enough to keep busy (20.4%), and that they are not needed (20.6%). The only significant group difference shows that males are significantly more likely than females to report not having enough friends (41.9% versus 20.8%). The total social fulfillment score also reflects this relationship (5.20 for males versus 5.58 for females).

3.1.6 Negative Life-Events

Negative life-events occurring during the past 12 months are shown in Table 7. The most commonly reported events are physical illness (28.6%), death of a close friend (26.2%) or other family member (19.2%). The total

score reflects the number of events reported. On average, respondents report only one negative event (1.02). Significant group differences shown in Table 6 indicate the following: males are more likely than females to report the loss of a spouse (3.4% versus 1.3%); those aged 66 to 70 years are the most likely to experience this same loss; males are more likely to have been assaulted or robbed (10.0% versus 3.5%); and those aged 60 to 70 years are more likely than their elder counterparts to report financial or property loss.

3.1.7   Social Support

Although 80.3% of our sample lives alone, high levels of social support are reported (Table 8). Most report having someone to confide in (86.7%) or to depend upon if ill (85.1%). A smaller proportion (63.9%) report speaking often to relatives on the telephone while less than half (44.9%) often visit with relatives. The total score shows that females report significantly greater social support than do males (6.82 versus 5.93). This relationship of greater social support among females holds for frequency of speaking with relatives on the telephone (48.1% for males vs. 71.2% for females) and visiting with relatives (37.4% for males vs. 48.4% for females). Subgroup differences show that females are more likely to live alone than males (84.4% vs. 71.4%), and that this difference increases with age.

3.1.8   Social Activity

As seen in Table 9, a large percentage are socially active. Over half, 56.9%, often participate in recreational activities or hobbies, and 74% socialize with friends. The only difference shows that females are significantly more likely than males to socialize with friends (77.2% versus 67.1%).

3.1.9   Health & Well-Being: Summary

Before proceeding to describe the patterns and extent of alcohol and other drug use, we will first briefly summarize some important patterns which emerge from these data.

Two groups, males and those aged 60 to 65 years, are the most likely to report lower levels of well-being. For the 11 well-being measures, males, in contrast to females, report the following:

- less happiness
- greater negative life-events
- lower social support
- lower social activity
- lower social fulfillment
- greater loneliness.

Those aged 60 to 65 years, in contrast to other age groups, are the most likely to report the following:

- poorer health
- less life satisfaction
- less positive feelings
- greater negative life-events
- lower social support.

3.2 Alcohol Use
3.2.1 Prevalence

Table 10 shows the prevalence and consumption of alcohol. Overall, 52.2% report drinking during the past 12 months, a behaviour more common among males than females (64.0% vs. 46.8%). Daily drinking, reported by 10.7% of the sample, is three times more likely to occur among males than females (20.2% versus 6.3%). The most common type of alcohol consumed is wine (34.3%) followed by liquor (32.4%) and beer (27.5%). Beer, however, is the type of alcohol most likely consumed on a daily basis (4.8%) followed by liquor (4.0%) and wine (1.4%). Both the annual and daily use of beer is significantly greater among males than females (53.8% versus 15.5% and 13.6% versus 0.8%, respectively). No significant age differences are apparent.

To examine the quantity of alcohol consumed we use two related measures of alcohol intake: total ounces of absolute alcohol,[9] and the number of standard drinks. We define one standard drink being equivalent to 12 ounces beer, 1.5 ounces of liquor, and 5 ounces of wine. One standard drink is approximately equal to .6 oz. of absolute alcohol.

As seen in Table 10, the average number of standard drinks consumed is 1.0 per week, with males reporting significantly greater consumption than females (2.53 versus .31). No age differences are significant. Among drinkers (see Table 11) the average number of standard drinks is 1.92 (3.2 oz.). Again, consumption is higher among males (3.95) than among females (.66), but did not vary by age group.

One suggested criteria of "heavy social drinking" among older adults is the consumption of one or more ounces of absolute alcohol daily (Barnes, 1982), an amount roughly equivalent to 3 standard drinks daily. In our data, this corresponds to the number of daily drinkers reporting at least 7 ounces of absolute alcohol per week. As noted in Table 10, about 5% of the total sample (10% of drinkers) report consumption at this level. Again, males are significantly more likely than females to report this level of consumption (12.8% versus 1.7% among the total sample and 20.0% vs. 3.6% among drinkers).

3.2.2 Problematic Drinking

Table 11 shows four items reflecting heavier drinking and problematic patterns of use. The most common of the four is drinking alone (20.7%) followed by consuming five or more drinks at a single sitting (6.6%), drinking before noon (4.5%) and having sought treatment for alcohol or drugs (2.1%). In all cases males are significantly more likely than females to report positively. In addition, those aged 60 to 65 years are the most likely to report having sought treatment (8.5%).

Indicators of problem drinking are displayed in Figure 1. The four items most commonly reported are ought to cut down, reported by 13.1% of the sample (17.2% of drinkers), followed by feeling guilty (8.9% of the sample and 11.8% of drinkers), drinking in the morning (6.2% of sample and 8.5% of drinkers) and being criticized by others because of drinking (4.6% of sample and 6.1% or drinkers).

Strong gender and age differences are evident. Respondents showing the most elevated degree of problematic drinking are males and those aged 60 to 65 years. For all indicators males are significantly more likely (at minimum five times more likely) to report these behaviours than are females. Those

aged 60 to 65 years are significantly more likely to report problems, with the exception of ought to cut down.

Two summary measures, the average of a count of all positive responses to the four questions and the percentage reporting two or more positive responses (Ewing, 1984) are used to capture alcohol problems. Overall, 8.3% of the total sample responded positively to at least two items. As seen with the individual items, strong gender and age differences exist. Males and those aged 60 to 65 years are the most likely to report problems at this criteria.

Among drinkers much the same pattern emerges (see Table 12). The only exception is that females are significantly more likely to report drinking wine than are males (74.8% versus 52.4%).

As with well-being measures it is important to place these findings in the context of studies on other populations. Compared to other samples, our respondents are less likely to report current drinking. We found 48% reported not drinking during the past 12 months versus 29% of Metro residents and 31% of an Edmonton sample (Sawka, 1978). Daily drinking was also less likely among our sample than among Metro residents (11% versus 21%). The Canada Health Survey (Health & Welfare Canada, 1981) found rates of daily drinking at similar levels to ours. Among those aged 70 years and over, 22% of males and 5% of females reported daily drinking versus 20% of males and 6% of females in our sample. Heavier drinking patterns, i.e., reporting five or more drinks at a single sitting, were also less likely to occur in our sample than among Toronto adults generally. About 7% of our respondents reported drinking five or more drinks on a single occasion versus 20% of Toronto residents. In Edmonton, 4% reported drinking four or more drinks on one occasion once a month or more often (Sawka, 1978). Unfortunately no direct comparisons can be made for rates of alcohol problems. However, similar numbers reported having experienced one or more dependency symptoms (out of seven) in a study in Durham, Ontario, as reported two or more problems (out of four) in our study (10.6% versus 8.4%). The relationship between gender and problems was also similar for both studies (19.6% versus 22.0% for males and 1.6% versus 2.1% for females). Many of the above differences between our sample and others, especially the Toronto sample, may be due to demographic differences. Our sample has a greater distribution of subgroups which are less likely to drink – females and the more elderly.

3.2.3   Reasons for Drinking

When asked why they drank, the most commonly cited reasons reflect patterns of functional social drinking: to be sociable (51.4%); to complement meals (33.3%); and liking the taste (25.0%) (Table 13). A small number, however, elicited reasons that would suggest coping motivations: 7.2% report drinking to cheer themselves up; 6.7% to block out loneliness and 5.7% to increase self-confidence.

Indeed, when we examined the association between reasons for drinking by whether the respondent reported two or more problems (data not shown) we found strong correlations. Just over one-quarter of those who typically drank for social reasons reported two or more problems: to be sociable (26%), followed by to complement a meal (27%) and because they enjoyed the taste (28%). In contrast, the majority of those who report typically drinking for nonsocial reasons reported two or more problems: to block out loneliness (100%); to cheer up (87%); to help sleep (80%); to relax and relieve pain (78%); to relieve tension (77%); to pass time (76%); and to give self-confidence (72%). Similar associations between problem drinking and reasons have been noted by others (Christopherson et al., 1984).

In Table 13, we also see numerous gender and age differences. Two points are worthy of mention. First, few subgroup differences occur for social reasons for drinking. Second, nonsocial reasons are more likely reported by males and those aged 60 to 65 years.

3.3   Medical Drug Use
3.3.1 Prevalence

Table 14 shows the annual use of analgesics, heart/blood medicine, sleeping preparations and tranquillizers. The most commonly used are analgesics (61.0%) followed by heart and blood pressure preparations (49.1%). These were followed by use of sleeping preparations (22.9%) and tranquillizers (12.8%). On a daily basis, however, heart and blood pressure medicine are the most commonly used (45.1%) followed by pain relievers (30.2%), sleeping pills (11.6%), and tranquillizers (9.0%) (see Figure 2). Respondents are most likely

to report using more than one substance to treat heart and blood pressure (23%), followed by pain relievers (15%), tranquillizers (3%) and sleeping pills (2%).

The two most commonly used pain relievers are ASA (used by 32%) and acetaminophen (34%). The majority used pain relievers on prescription (61%), and followed directions exactly (70%). One-third (30%) used less than directed and less than 1% used more.

Minor tranquillizers accounted for 67% of all tranquillizer use, followed by antidepressants (20%) and antipsychotics (10%). Most report following the prescription exactly (63%), while 35% use less and 2% use more.

Among those using sleeping preparations the most common substances were sedative-hypnotics (triazolam, 32% and flurazepam, 11%). About 15% reported the use of diazepam. The majority (65%) reported following the prescription exactly, while 32% took less and 3% took more than was prescribed.

Heart and blood pressure preparations showed the most substance variation. In total about 40 substances were prescribed. The two most commonly used were hydrochlorothiazide and digoxin, both used by 11% of users. Respondents using any drug in this category followed their prescription closely; 91% followed it exactly, while 9% used less than directed.

Turning to differences in rates of use by gender or age, only three are statistically significant. (See Table 14, Figure 2). Females are more likely than males to report daily use of medicine for heart and blood pressure (49.5% versus 35.5%, respectively).[10] Both annual and daily rate of tranquillizer use is most likely to occur among those aged 60 to 65 years. About 19.7% of those aged 60-65 years report daily tranquillizer use versus 8.6% of those aged 66-70 years, 3.8% aged 71-75 years and 8.0% of those aged 76 and over.

We can make only limited comparisons between our sample estimates and those of other populations. Compared to the Canada Health Survey (CHS), respondents in our sample are more likely to report daily use of pain relievers (26% versus 16% for males and 32% versus 25% for females). Similarly, 36% of males and 50% of females in our sample reported daily use of heart and blood pressure medicines versus 29% males and 41% females from the CHS. Compared to Toronto residents, our respondents are slightly more likely to report tranquillizer use (13% versus 8%) and twice as likely to report its use daily (9%

versus 4%). Unlike the CHS which found strong gender differences (10% for males versus 20% for females), we found roughly equal rates of use for tranquillizers (8% versus 10% respectively).

In addition to examining rates of use for each drug, we also examined the total number of the four drugs used on a daily basis. In total, 36.0% reported the use of none, 39.4% used one drug, 18.2% used two, 5.4% used three, and 1.0% used four (mean=.96; SD=.92, median=1; mode=1). The only significant subgroup difference showed that females reported using more drugs than males (1.03 versus .81, respectively; p=.041).

3.3.2 Problematic Drug Use

The five items used to measure the extent of drug problems were derived from the Drug Abuse Screening Test (Skinner, 1982). Although under 1% had ever received attention for a drug problem, almost 16% feel "bad" about their use of drugs (Table 15). The only significant group difference shows that those aged 76 years and over are the least likely to feel badly about their drug use (10% versus 22% of 60–65-year-olds, 18% of 66–70-year-olds, and 23% of 71–75-year-olds).

3.4 Associations Between Well–Being & Alcohol and Other Drug Use
3.4.1. Alcohol Use

Table 16 shows the relationship between alcohol use and measures of well–being. We use correlations to measure the degree of linear (straight-line) association between drug use and well–being. Correlations of 1.0 (or –1.0) indicate a perfect linear relationship between two variables; correlations near zero indicate no linear relationship. Positively–signed correlations indicate that high (or low) values on one variable are associated with high (or low) values on the other; negatively–signed correlations indicate the high (or low) values on one variable are associated with low (or high) variables on the other. Correlations measure strength of associations and in our case cannot be interpreted as a causal relationship.

As seen in Table 16, greater alcohol intake is associated with lower social fulfillment (r=.20), greater mastery (r=.16), greater negative life–events

(r=.16) and greater negative affect (r=.11). Drinking <u>five</u> <u>or</u> <u>more</u> <u>drinks</u> at a single sitting is associated with lower social fulfillment (r=-.18), greater mastery (r=.13), greater negative life-events (r=.13), lower life satisfaction (r=-.10), lower positive affect (r=-.14) and greater negative affect (r=.14). <u>Alcohol</u> <u>problems</u> are associated with lower social fulfillment (r=-.18), greater mastery (r=.16), lower social support (r=-.15) and greater negative life-events (r=.09).

Two alcohol consumption relationships which may be especially related in our sample are variation due to respondent disability and ethnic status. Beginning with health disabilities, some studies have noted greater negative health outcomes (Turner & Noh, 1988) and greater alcohol consumption among disabled persons (Dean et al., 1985; Nagi, 1976). We use here four measures of disability: whether the respondent (1) reports that health greatly impedes their activities, (2) uses a wheelchair; (3)reports hearing problems; and (4) reports employment status as disabled. These data (not tabled) indicated the following. First, daily use of pain relievers and heart preparations were more common among those reporting that their health was impeded a great deal than those who did not (59% versus 24% and 58% versus 43%, respectively). Second, use among those confined to a wheelchair was not higher than others. Third, those with hearing problems were more likely to use pain relievers daily than those with no hearing problems (38% versus 27%). Finally, those who reported a disabled employment status were significantly more likely than others to report two or more alcohol problems (34% versus 7%).

Turning to ethnic differences in alcohol use, there has been long-standing empirical evidence of differences in rates of use (Pitman & Synder, 1962). Given the ethnic make-up of older Canadians (Driedger & Chappell, 1987; Ujimoto, 1987) and our sample in particular, we would expect stronger ethnic differences assuming that older Canadians are more likely to maintain their past patterns of behaviour.

For our preliminary examination we grouped ancestry on the male side into eight categories reflecting geo-political groups. These groupings are restrictive and should not be interpreted as capturing the full meaning of ethnicity. These data showed that although those with male ancestors from United Kingdom and Western and Eastern Europe were slightly more likely to report daily drinking, high consumption and greater alcohol problems relative

to other groups, none of these differences were statistically significant. Future work will examine these preliminary findings in greater detail.

3.4.2. Medical Drug Use

Table 17 shows the correlations between frequency of drug use and well-being. The factors most associated with use are negative life-events and negative affect. Those reporting greater negative life-events also report more frequent use for each of the four substances (correlations range in values from .10 to .17). In addition, those reporting better overall health are less likely to use pain relievers ($r=-.25$), sleeping pills ($r=-.11$) and heart and blood medicine ($r=-.28$) frequently; those who express greater life satisfaction are less likely to use tranquillizers ($r=-.16$) and sleeping pills ($r=-.10$) frequently; and those who report greater happiness are less likely to use sleeping pills frequently ($r=-.10$).

4. Summary & Discussion

Before summarizing and discussing these findings we must first note the limitations of this study. First, since we had no means of corroborating responses we cannot clearly establish the validity of many of our measures. Responses, however, did show high levels of reliability in the test-retest sample. The second limitation regards the nature of the sample. Demographically, our sample differed from those residing in the general population on several counts: they were older; they were more likely to be female, not currently married, and retired; and they were less educated and had a lower income. Yet, it is perhaps these very differences which make these data important. Relative to the wider population this sample has more fully experienced many of the life-course changes which occur in later life. Thus, despite their lack of representativeness to the general population, these data are analytically important.

Turning to the findings, we noted earlier in summarizing the findings about health and well-being a general pattern showing males and those aged 60 to 65 years were prone to lower levels of well-being. It is perhaps not surprising that much the same pattern holds for alcohol use and problems as well. Males were significantly more likely than females to report alcohol use and problems of every nature. This gender difference, however, is restricted to the use of alcohol and reflects a general pattern common to adults of all ages. Of the four other substances we measured, none were used by males more than females. Indeed, with the exception of greater daily heart/blood medicine use among females no gender differences were evident.

Regarding the effect of age, again we find a greater likelihood of alcohol problems among the youngest group. Although alcohol consumption does not vary significantly by age, those aged 60 to 65 years report the highest rate of three of four alcohol problem indicators (feeling guilty, morning drinking, and criticized by others) and a summary measure of alcohol problems (reporting two or more). In addition, this age group reported the highest rate of annual and daily tranquillizer use and of drug problems overall.

It may be argued that lower well-being and greater alcohol problems among these two groups are due not so much to real differences, but to differences in their reporting. Conceivably younger respondents are more open

and honest than older ones. Indeed, there is some evidence showing increases in socially-desirable responding with increasing age (Bradburn & Sudman, 1981). Although we cannot disprove this response-bias interpretation, we believe that it does not fully account for differences found in our data.

To begin with, following Sudman and Bradburn's (1983) suggestion, at the end of the interview we asked respondents how uneasy most people would feel in answering the questionnaire. Such an item can measure both the general level of threat posed by questions and respondent veracity. Those reporting that most people would feel very uneasy should be more likely to underreport than others. The data showed that only 10% reported that most would feel very uneasy; almost half (46%) reported most would feel not at all uneasy. Moveover, reported uneasiness was not significantly related to gender or age group, which should be evident if response-bias accounted for differences in well-being and drug use. Another reason to suggest that these findings are not spurious is that their generality extends beyond our data. Other studies, most notably the American Quality of Life Surveys, have noted similar relationships (Campell et al., 1976).

One theoretical explanation of poorer well-being and greater alcohol problems and tranquillizer use among the youngest age group centers on the transition between the working world and retirement. This particular transition may be initially stressful on several counts. Individuals must adjust to roles which are often perceived as being more dependent and unproductive (Mortimer & Simmons, 1978). Such changes as retirement and widowhood engender a loss of status which is often involuntary (Rosow, 1974). Even if individuals are prepared for such role changes, they may still be stressful (Pearlin & Lieberman, 1979).

Turning to the association between alcohol and other drug use and well-being a number of patterns emerged. The most prominent was the effect of negative life-events. With the exception of frequency of alcohol use, negative life-events showed a positive relationship to alcohol intake, drinking five or more drinks at a single sitting, alcohol problems and the use of analgesics, tranquillizers, sleeping pills and heart/blood medicine.

Following life-events, ratings of overall health showed a positive relationship to frequency of alcohol use and a negative one to the use of analgesics, sleeping pills and heart/blood medicine.

The associations of the remaining well-being variables were differentially related to type of drug use. Social fulfillment, powerlessness and social support were significantly related to use of alcohol and to problems, but not to the use of other drugs. <u>Greater alcohol intake</u> was associated with

- lower social fulfillment
- greater mastery
- greater negative life-events
- greater negative feelings.

<u>Greater alcohol problems</u> were associated with

- lower social fulfillment
- greater mastery
- lower social support
- greater negative life-events.

On the other hand, measures of subjective well-being were more related to other drug use. <u>Greater medical drug use</u> was associated with

- less life satisfaction for use of tranquillizers and sleeping pills
- less happiness for use of sleeping pill and heart/blood medicine, and
- greater negative feelings for use of pain relievers, tranquillizers, sleeping pills and heart/blood medicine.

These preliminary findings raise a number of issues. First, with the exception of two subgroups, males and those aged 60 to 65 years, respondents reported functional levels of well-being. This finding is consistent with studies that suggest age-segregated environments promote a greater sense of well-being and satisfaction (Teaff et al., 1978; Longino et al., 1980). There is also evidence to suggest that many living in multigenerational households are older and more functionally impaired than those living in other household types (Beland, 1984). Still, it is unclear whether healthier individuals are drawn to elderly residential environments or whether it is the environment which promotes well-being.

A second issue centers on alcohol use and problems among this population, particularly in contrast to their counterparts living in the general (noninstitutionalized) population and as well in contrast to younger adults. Although respondents in our sample were less likely to report drinking, rates of alcohol problems do not appear to differ dramatically from those living in a

single household environment. Clearly, among older adults it is the youngest group, and especially males, that are at risk for alcohol and other health-related problems. Still, and as other studies have suggested (Holzer et al., 1984), similar correlates of use, such as gender, play an important role regardless of one's age.

The purpose of this report was to present preliminary descriptive information. Many questions still remain. Most notably, because of the treatment and prevention implications, we must further examine whether less well-being and greater alcohol use among males and among the youngest adults still hold after controlling for other demographic and psychological factors. We must also direct future work towards examining more closely the role of ethnicity and environmental or community differences in health and drug use, and the impact of role transition from work to retirement. For these reasons our findings are preliminary until their stability can be demonstrated.

The most obvious social policy implication centers on the growing numbers of older adults in the population. More attention must be directed to this impact on current and future public health needs. It is still unclear whether declines in drinking across the life-course are enduring and not restricted to cohort effects (Fillmore, 1988); that is, we cannot assume that drinking among currently middle-aged adults will necessarily decline with age as it has in the past. However, even if these maturational declines are found to be independent of cohort and historical influences, due to the increasing size of the population base, there will likely be increases in the absolute numbers requiring treatment or other interventions.

5. Tables & Figures

Table 1

Sample Characteristics and Comparison
(in percentages)

Characteristic	Study Sample (N=349)	Metro Toronto Comparison (N=109)
Age Category		
60-65	16.7	37.6
66-70	16.4	30.0
71-75	22.7	20.3
76+	44.2	12.1
(mean)	(74.1)	(68.0)
Gender		
Male	31.4	46.7
Female	68.6	53.3
Marital Status		
Single	13.1	1.8
Married	21.0	68.8
Widowed	51.6	28.4
Divorced	7.2	−
Separated	7.1	−
Religion		
Protestant	53.5	66.1
Roman Catholic	24.6	16.7
Jewish	0.5	9.0
Other	13.7	3.6
None	7.7	4.6
Formal Education		
Elementary	45.2	18.0
Secondary	40.7	55.8
Post-Secondary	14.0	26.2
Employment Status		
Full Time	2.3	22.8
Part Time	1.4	8.5
Not employed	96.3	68.7
Household Income		
<10,000	75.3	12.6
10,000-14,999	18.6	6.8
15,000-19,999	3.7	9.5
20,000-29,999	1.7	25.5
30,000+	0.8	45.5

Table 2

Physical Health

Variable (in percentages)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Poor overall health	11.1 (±3.3)	9.0	12.1	21.9	8.7	16.9	5.1
Health impeded a great deal	18.1 (±4.0)	16.1	19.0	31.5	8.4	18.6	16.9
Seen doctor for heart trouble	32.5 (±4.9)	27.5	34.8	24.0	31.4	30.6	37.8
Seen doctor for circulation problems	29.0 (±4.7)	30.4	28.4	31.0	27.3	31.9	27.9
Times seen physician average number days	10.6	10.3	10.8	12.4	11.5	10.7	9.7
Days in hospital average number days	4.2	6.3	3.3	5.0	3.7	4.7	4.0
TOTAL HEALTH SCORE	5.62	5.61	5.62	5.19	6.05	5.34	5.74
No days at physician	4.0	2.5	4.7	5.2	7.0	2.6	3.3
No days in hospital	76.6	68.7	80.2	73.1	79.9	76.5	76.3
Uses wheelchair	2.2 (±4.3)	0.8	2.8	3.8	0.0	1.4	2.9

Note: Underlined values represent statistically significant gender or age differences at $p < .05$

Table 3

Subjective Well-Being

Variable	Total	Gender		Age			
		Male	Female	60-65	66-70	71-75	76+
	(N=349)	(N=109)	(N=239)	(N=58)	(N=57)	(N=79)	(N=153)
LIFE SATISFACTION (percent agreeing)							
I am fairly well-satisfied	84.4 (±3.8)	85.3	84.0	69.7	84.8	85.4	89.0
Wouldn't change past life	64.2 (±5.0)	61.4	65.5	40.5	61.2	70.8	70.8
Have got what I expected	70.5 (±4.7)	74.2	68.8	48.8	68.7	79.1	75.8
Have got more of the breaks	68.6 (±4.8)	72.7	66.7	58.2	67.4	67.4	73.2
TOTAL LIFE SATISFACTION SCORE	1.54	1.43	1.60	2.44	1.76	1.35	1.22
HAPPINESS (percent agreeing)							
Am just as happy as when I was younger	64.2 (±5.0)	65.8	63.4	51.7	78.6	68.9	61.9
My life could be happier	52.0 (±5.2)	65.8	45.6	60.7	61.2	46.8	48.1
These are the best years of my life	53.7 (±5.2)	56.8	52.3	39.1	61.0	52.0	58.1
TOTAL HAPPINESS SCORE	1.71	1.77	1.68	2.09	1.78	1.41	1.59

Table 3 continued

Variable (in percentages)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)

POSITIVE AFFECT
(percent responding often)

Variable	Total	Male	Female	60-65	66-70	71-75	76+
I feel excited	14.0 (±3.6)	11.8	15.1	14.4	23.9	19.0	7.8
I feel pleased	50.6 (±5.2)	39.8	55.5	32.2	64.2	45.7	55.0
I feel restless	16.8 (±3.9)	13.8	18.1	19.8	16.2	17.3	15.7
I feel on top of the world	14.9 (±3.7)	14.5	15.1	13.5	18.4	12.6	15.7
TOTAL POSITIVE AFFECT	4.27	4.51	4.17	4.75	3.49	4.36	4.33

NEGATIVE AFFECT
(percent repsonding often)

Variable	Total	Male	Female	60-65	66-70	71-75	76+
I feel very lonely	9.6 (±3.1)	11.5	8.7	9.1	12.9	9.1	8.9
Feel things are going my way	32.0 (±4.8)	31.7	32.1	25.0	34.2	22.6	38.5
I feel bored	8.1 (±2.8)	8.3	8.0	12.4	9.2	9.7	5.3
I feel depressed	7.7 (±2.8)	7.2	7.9	11.9	6.6	7.5	6.6
TOTAL NEGATIVE AFFECT	1.95	1.96	1.95	2.34	2.01	1.97	1.78

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 4

Mastery

Variable (percentage agreeing)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Success is hard work – not luck	72.0 (±4.7)	71.6	72.2	74.8	68.3	71.9	73.0
What happens is my doing	81.9 (±4.0)	82.3	81.7	77.4	80.1	85.9	82.7
Lives controlled by accident	65.6 (±4.9)	62.3	67.0	67.6	66.4	63.3	65.9
Little influence over things	56.4 (±5.2)	58.8	55.3	56.6	56.5	56.7	57.0
TOTAL SCORE	5.63	5.85	5.53	5.52	5.72	5.68	5.61

Table 5

Loneliness

Variable (percentage responding often)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
I feel lonely often	9.2 (±3.0)	8.6	9.4	5.7	11.4	11.7	8.5
Enough close relationships	52.8 (±5.2)	46.1	55.8	51.0	63.5	46.5	52.3
Emotionally satisfied in relation	64.0 (±5.0)	55.4	67.9	64.7	64.8	61.8	65.6
TOTAL SCORE	4.42	4.26	4.50	4.45	4.59	4.24	4.46

Note: Underlined values represent statistically significant gender or age differences at $p < .05$

Table 6

Social Fulfillment

| Variable (percentage agreeing) | Total (N=349) | Gender | | 60-65 (N=58) | Age | | 76+ (N=153) |
		Male (N=109)	Female (N=239)		66-70 (N=57)	71-75 (N=79)	
Not enough friends	27.3 (±4.6)	<u>41.9</u>	<u>20.8</u>	25.3	20.7	32.8	27.9
Not enough to keep busy	20.4 (±4.2)	25.3	18.1	21.5	15.7	23.1	20.5
Do not feel needed	20.6 (±4.2)	23.8	19.2	27.2	22.0	16.0	20.5
TOTAL SCORE	5.47	<u>5.20</u>	<u>5.58</u>	5.40	5.61	5.37	5.48

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 7

Negative Life-Events

Variable (percentage experiencing event)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Physical illness	28.6 (±4.7)	23.4	30.9	39.0	21.4	30.7	25.4
Close friend died	26.2 (±4.6)	24.7	26.9	19.4	17.3	27.1	31.3
Other family member died	19.2 (±4.1)	14.6	21.3	23.2	23.3	23.2	14.5
Injury	9.9 (±3.1)	9.6	10.0	10.2	5.1	10.3	11.5
Financial or property loss	6.5 (±2.6)	8.4	5.6	<u>10.3</u>	<u>14.1</u>	<u>4.0</u>	<u>3.7</u>
Assaulted or robbed	5.5 (±2.4)	<u>10.0</u>	<u>3.5</u>	5.4	4.3	3.1	7.3
Moved to worse home or area	3.6 (±1.9)	5.9	2.5	9.5	1.6	3.9	2.0
Spouse died	1.9 (±1.4)	<u>3.4</u>	<u>1.3</u>	<u>2.0</u>	<u>4.3</u>	<u>0.0</u>	<u>2.1</u>
Lost drivers licence	1.4 (±1.2)	1.8	1.2	0.0	0.0	4.9	0.6
TOTAL SCORE	1.02	1.00	1.02	1.16	.90	1.07	.97

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 8

Social Support

Variable (in percentages)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Have someone to confide in	86.7 (±3.5)	83.6	88.1	90.9	90.2	83.5	85.3
Have someone to depend upon if ill	85.1 (±3.7)	80.9	87.0	87.7	86.3	80.8	85.6
Often speak with relatives	63.9 (±5.0)	48.1	71.2	63.6	76.2	66.0	57.9
Often visit with relatives	44.9 (±5.2)	37.4	48.4	39.3	57.5	47.3	41.0
Lives alone	80.3 (±4.1)	71.4	84.4	68.2	75.7	74.8	89.1
TOTAL SCORE	6.55	5.93	6.82	6.64	6.99	6.70	6.25

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 9

Social Activity

Variable (percentage participating in social activities often)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Recreational activities/ hobbies	43.1 (±5.1)	44.0	42.7	45.1	34.9	46.9	42.6
Clubs/community organizations	53.4 (±5.2)	52.6	53.7	52.3	45.8	43.4	61.1
Socializing with friends	26.0 (±4.6)	<u>32.9</u>	<u>22.8</u>	22.5	21.7	24.4	30.0
Doing volunteer work	78.7 (±4.3)	77.1	79.4	80.0	72.5	81.2	78.9
TOTAL SCORE	3.08	2.95	3.14	3.16	3.36	3.15	2.94

Note: Underlined values represent statistically significant gender or age differences at $p < .05$

Table 10

Prevalence & Consumption of Alcohol Among Total Sample

Variable (percentage)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Alcohol in past year	52.2 (±5.2)	64.0	46.8	54.0	50.6	51.3	53.0
Daily drinking	10.7 (±3.2)	20.2	6.3	15.6	3.6	12.2	10.8
Beer in past year	27.5 (±4.6)	53.8	15.5	31.1	34.2	29.2	23.4
Daily drinking beer	4.8 (±2.2)	13.6	.8	8.2	1.7	6.5	4.0
Liquor in past year	32.4 (±4.9)	38.6	29.6	31.3	36.6	33.5	30.6
Daily drinking liquor	4.0 (±2.0)	6.7	2.8	3.2	1.9	5.8	4.3
Wine in past year	34.3 (±4.9)	33.5	34.7	37.9	28.5	34.4	35.1
Daily drinking wine	1.4 (±1.2)	.9	1.6	3.3	0.0	0.0	1.9
Average oz. per week	1.67	4.21	.51	3.26	.63	2.32	1.16
Standard Drink	1.00	2.53	.31	1.95	.38	1.39	.70
% consuming 1 oz./day	5.2	12.8	1.7	6.9	3.5	7.6	3.9

Note: Underlined values represent statistically significant gender or age differences at $p < .05$

Table 11

Problematic Drinking and Consequences

Variable (in percentages)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Five or more drinks on one occasion	6.6 (±2.6)	18.3	1.2	12.7	0.0	5.4	7.5
Do you ever drink alone	20.7 (±4.2)	37.1	13.2	25.6	20.8	24.5	17.3
Drink before noon	4.5 (±2.2)	11.7	1.1	5.3	1.7	7.8	3.5
Ever had treatment for alcohol/drugs	2.1 (±1.5)	5.9	.4	8.5	0.0	3.3	0.0

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 12

Prevalence of Alcohol Use Among Drinkers

Variable	Total	Gender		Age			
		Male	Female	60-65	66-70	71-75	76+
	(N=182)	(N=70)	(N=112)	(N=31)	(N=29)	(N=40)	(N=81)
Daily drinking (all alc.)	20.4 (±5.8)	31.6	13.4	28.8	7.1	23.9	20.4
Beer in past year	52.7 (±7.2)	84.0	33.2	57.6	67.5	57.0	44.3
Daily beer drinking	9.3 (±4.2)	21.2	1.8	15.1	3.4	12.7	7.5
Liquor in past year	62.6 (±7.0)	60.3	64.0	58.0	72.4	65.4	58.9
Daily liquor drinking	7.8 (±3.9)	10.5	6.0	6.0	3.7	11.3	8.2
Wine in past year	66.1 (±6.8)	52.4	74.8	70.2	56.2	67.1	67.1
Daily wine drinking	2.6 (±2.4)	1.4	3.4	6.1	0.0	0.0	3.6
Five or more on one occasion	12.2 (±4.7)	28.6	1.7	24.4	0.0	10.6	13.0
Do you ever drink alone	38.1 (±6.9)	55.9	26.8	47.5	41.0	47.8	29.0
Drink before noon	8.8 (±4.0)	19.0	2.5	10.1	3.6	15.3	6.8
Ever had treatment for alcohol/drugs	2.5 (±2.2)	6.5	0.0	6.2	0.0	6.4	0.0
oz./week	3.21	6.58	1.10	6.04	1.25	4.53	2.20
Standard drinks/week	1.92	3.95	.66	3.62	.75	2.72	1.32
% consuming 1oz/per day	9.9	20.0	3.6	12.9	6.9	14.6	7.4

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 13

Reported Reasons for Drinking

Variable (in percentages)	Total (N=182)	Gender		Age			
		Male (N=70)	Female (N=112)	60-65 (N=31)	66-70 (N=29)	71-75 (N=40)	76+ (N=81)
Drink to be sociable	51.4 (±7.2)	56.7	48.3	56.6	53.2	60.4	45.5
Drink to complement meals	33.3 (±6.8)	30.9	34.8	37.4	33.3	35.0	30.2
Drink because like the taste	25.0 (±6.3)	36.2	18.4	37.7	23.0	29.9	18.4
Drink to relax	19.4 (±5.7)	29.1	13.7	38.4	8.9	17.0	16.1
Drink to pass the time	15.8 (±5.3)	30.2	7.2	30.9	8.1	18.6	10.8
Drink to relieve tension	12.0 (±4.7)	21.8	6.1	31.2	9.9	7.0	7.5
Drink to sleep	8.8 (±4.0)	12.5	6.5	12.9	9.4	8.4	7.2
Drink to cheer up	7.2 (±4.0)	13.8	3.4	24.0	3.5	4.9	2.7
Drink for self-confidence	5.7 (±3.3)	13.1	1.4	13.9	3.5	3.5	4.1
Drink to block out lonliness	6.7 (±3.6)	11.5	3.9	9.5	2.9	9.9	5.3
Drink to relieve pain	4.4 (±2.9)	3.9	4.7	11.7	3.3	5.0	1.6

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 14

Percentage Reporting Drug Use During the Past 12 Months

| Variable | Total (N=349) | Gender | | Age | | | |
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Pain relievers	61.0 (±5.1)	53.1	64.5	61.9	49.4	58.9	66.8
Tranquillizers	12.8 (±3.5)	13.1	12.6	27.0	8.8	7.4	11.8
Sleeping preparations	22.9 (±4.4)	22.5	23.1	31.0	16.9	26.5	20.4
Medicine for heart/blood pressure	49.1 (±5.2)	41.5	52.6	41.1	51.1	43.0	54.8

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 15

Drug Problems

Variable (in percentages)	Total (N=349)	Gender		Age			
		Male (N=109)	Female (N=239)	60-65 (N=58)	66-70 (N=57)	71-75 (N=79)	76+ (N=153)
Used drugs other than for medical reason	2.4 (±1.6)	3.0	2.1	4.9	0.0	2.8	2.1
Not able to stop using drugs	20.9 (±4.2)	16.1	23.0	28.5	19.0	23.3	17.3
Have felt bad about drug use	15.9 (±3.8)	14.9	16.4	21.7	17.7	22.9	9.6
Have gone for help with a drug problem	0.6 (±8.0)	1.9	0.0	1.7	0.0	1.4	0.0
Have been in hospital for problem with drug use	0.8 (±9.3)	1.8	0.4	3.4	0.0	0.0	0.6
TOTAL SCORE	.36	.33	.38	.56	.34	.46	.25

Note: Underlined values represent statistically significant gender or age differences at p<.05

Table 16

Correlations Among Well-Being Scores and
Alcohol Consumption & Problems

Total Score	Frequency of Use	Ounces/ week	Frequency 5+	Alcohol Problem Score
Health	.13*	-.08	.07	-.05
Social Activity	.16*	.07	-.03	.02
Social Fulfillment	-.07	-.20*	-.18*	-.18*
Loneliness	-.01	-.06	.07	-.06
Mastery	-.07	.16*	.13*	.16*
Social Support	.01	-.03	.07	-.15*
Negative Life-Events	-.02	.16*	.13*	.09*
Subjective Well-Being				
Congruence	.03	-.01	-.10*	.05
Happiness	-.03	.03	-.04	-.01
Positive Affect	-.01	.06	-.14*	.03
Negative Affect	-.01	.11*	.14*	-.05

*Indicates statistically significant correlation at $p < .05$

Note: positively-signed correlations indicate that the two variables increase (or decrease) together; negatively-signed ones indicate that the two variables move in opposite directions.

Table 17

Correlations Among Well-Being Scores and Annual Frequency
of Drug Use

Total Score	Pain Relievers	Tranquil- lizers	Sleeping Pills	Heart/ Blood Medicine
Health	-.25*	-.08	.11*	-.28*
Social Activity	.03	-.05	-.04	-.01
Social Fulfillment	.09	.01	-.07	-.02
Loneliness	-.02	-.07	-.08	.03
Mastery	-.07	-.05	.06	-.09
Social Support	-.06	.02	.00	.03
Negative Life-Events	.17*	.10*	.10*	.12*
Subjective Well-Being				
Congruence	-.02	-.16*	-.10*	.04
Happiness	.02	-.05	-.10*	-.07
Positive Affect	-.02	-.07	-.08	.00
Negative Affect	.10*	.13*	.11*	.12*

*Indicates significant correlation at p<.05

Note: positively-signed correlations indicate that the two variables increase (or decrease) together; negatively-signed ones indicate that the two variables move in opposite directions.

Figure 1
Alcohol Problems Among Total Sample

Mean Score

.78
.72
.39
.20
Average (.33)
.12
.21
Male Female 60-65 66-70 71-75 76+
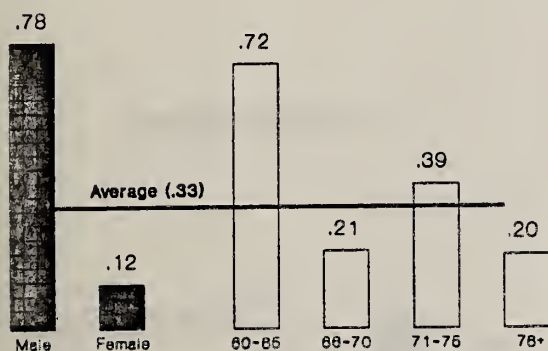
2+
(% responding yes to 2 or more)

25.9
22.0
8.9
Average (8.3)
2.1
5.3
3.3
Male Female 60-65 66-70 71-75 76+
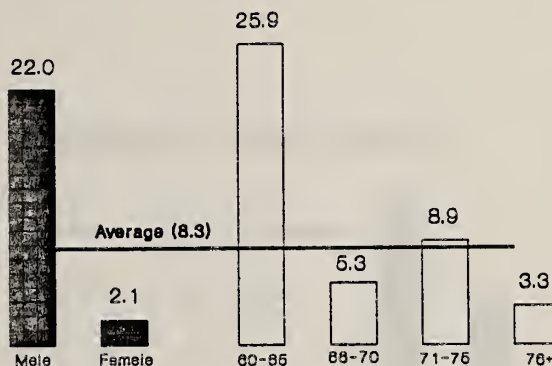
Ought to Cut Down
(% responding yes)
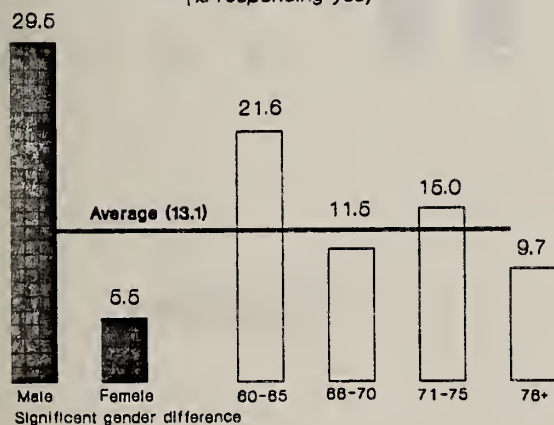
Criticized
(% responding yes)

29.5
21.6
15.0
9.7
Average (13.1)
5.5
11.5
Male Female 60-65 66-70 71-75 76+
Significant gender difference

11.9
13.6
4.3
2.5
Average (4.8)
1.3
1.9
Male Female 60-65 66-70 71-75 76+
Significant gender and age differences
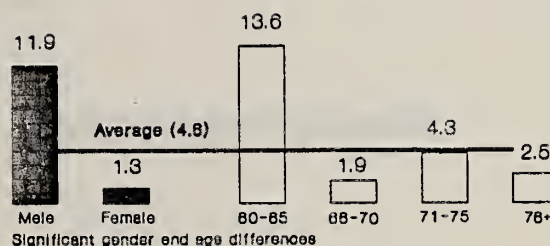
Feel Guilty
(% responding yes)
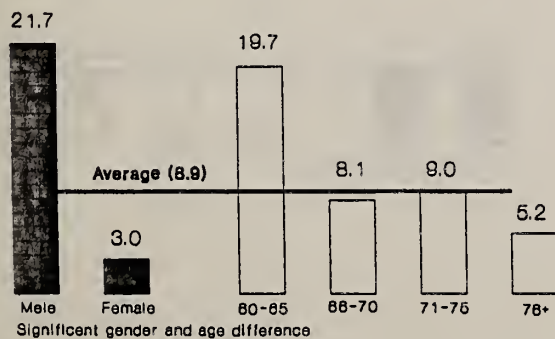
Drink in Morning
(% responding yes)

21.7
19.7
8.1
9.0
Average (8.9)
3.0
5.2
Male Female 60-65 66-70 71-75 76+
Significant gender and age difference

14.7
16.7
10.3
Average (6.2)
2.3
0.0
2.5
Male Female 60-65 66-70 71-75 76+
Significant gender and age differences
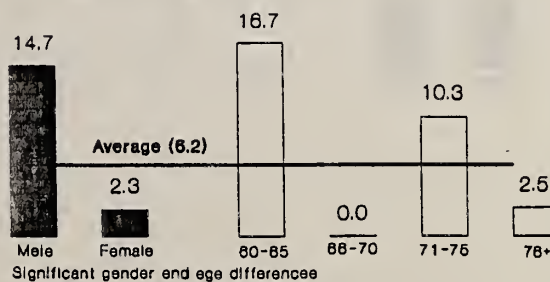
Figure 2
Percentage Reporting Daily Drug Use

Heart/Blood Pressure

49.5 Average (45.1) 48.3 41.2 50.5
35.5 35.5
Males Females 60-65 66-70 71-75 76+
Significant gender difference

Pain Relievers

32.4 31.5 Average (30.2) 33.9 33.0
25.5 18.1
Males Females 60-65 66-70 71-75 76+

Sleeping Preparations

17.6 Average (11.8) 14.6 10.5
12.0 11.4 4.9
Males Females 60-65 66-70 71-75 76+

Tranquillizers

19.7 8.6 Average (9.0) 8.0
8.0 9.5 3.8
Males Females 60-65 66-70 71-75 76+
Significant age difference
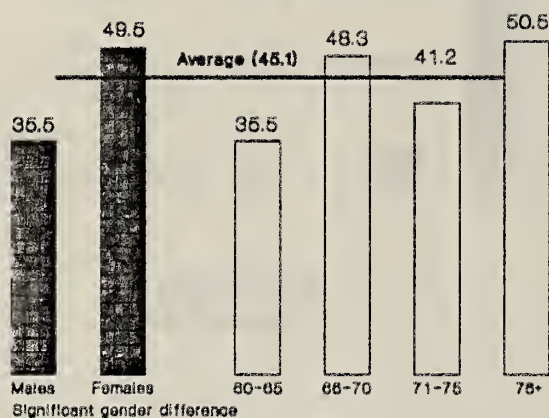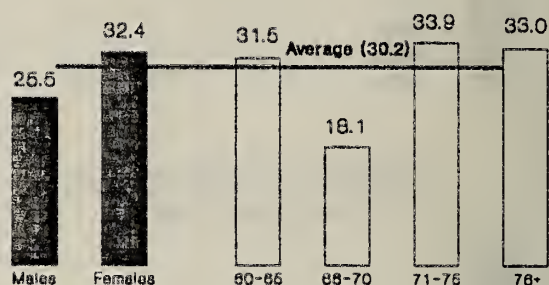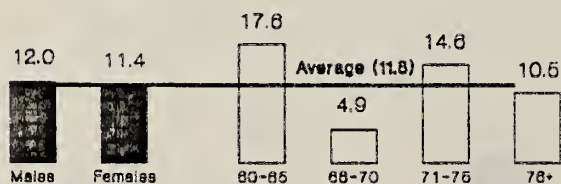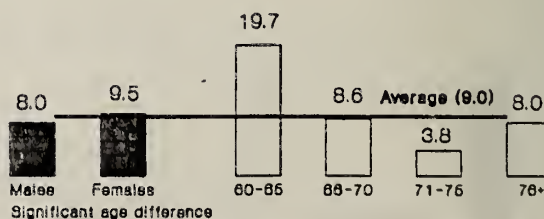
6. Appendices .

Appendix A

Questionnaire

ALCOHOL, DRUGS AND HEALTH

AMONG SENIOR ADULTS

QUESTIONNAIRE

🌐 *Addiction Research Foundation*

FOR OFFICE USE ONLY
SEQUENTIAL ID

| | | |

INTERVIEWER:

WE ARE GOING TO BEGIN THIS INTERVIEW BY FIRST ASKING YOU SOME IMPORTANT QUESTIONS REGARDING YOUR BACKGROUND, SUCH AS, WHO YOU LIVE WITH, YEAR OF BIRTH, MARITAL STATUS, PLACE OF BIRTH, ETC.

TIME INTERVIEW BEGINS _____ : _____   1 A.M.
                                           2 P.M.

1. HOW MANY OTHERS LIVE IN THE APARTMENT WITH YOU?

   3 None   1 1st other   2 2nd other
   ▼   ▼   ▼
   (GO TO Q2)

                        Sex: Sex:
                        1 Male   1 Male
                        2 Female   2 Female

                        Relationship: Relationship:
                        1 Spouse   1 Spouse
                        2 Child   2 Child
                        3 Friend   3 Friend

2. SEX OF RESPONDENT: 1 Male   2 Female

3. WHAT IS THE YEAR OF YOUR BIRTH? | | | | |

3

4. WHAT IS YOUR PRESENT MARITAL STATUS?

   1 Single (never married)
   2 Married once only
   3 Married (remarried)
   4 Common law
   5 Separated
   6 Divorced
   7 Widowed

5. WHAT IS THE HIGHEST LEVEL OF SCHOOLING YOU HAVE OBTAINED?

   1 Grade 8 or less
   2 Grade 9 to 11
   3 Grade 12 or 13
   4 Post-secondary (non-university)
   5 Some university
   6 Completed university

6. DO YOU SPEAK A SECOND LANGUAGE?

   1 No ➤ GO TO Q 7
   2 Yes

       6a WHAT LANGUAGE? _____ | |

4

7. IN WHAT COUNTRY WERE YOU BORN?

   1 Canada ➤ (GO TO Q 8)
   2 Other

       7b. WHICH OTHER COUNTRY? _____ | | |

       7c. IN WHAT YEAR DID YOU ARRIVE? 19| | |

8. ON COMING TO THIS CONTINENT, TO WHAT ETHNIC OR CULTURAL GROUP DID YOU OR YOUR ANCESTORS ON THE FEMALE SIDE BELONG?

   _____ | | |

9. ON COMING TO THIS CONTINENT, TO WHAT ETHNIC OR CULTURAL GROUP DID YOU OR YOUR ANCESTORS ON THE MALE SIDE BELONG?

   _____ | | |

10. WHAT IS YOUR RELIGION?

    1 Protestant
    2 Roman Catholic
    3 Jewish
    4 Eastern Orthodox
    5 Other religion
    6 No religion

11. HOW FREQUENTLY DO YOU ATTEND RELIGIOUS SERVICES?

[READ]

1 Frequently
2 Occasionally
3 Infrequently
4 Never

12. DO YOU HAVE A VALID DRIVERS' LICENCE?

1 No ▶ (GO TO Q 13)
2 Yes

12a. HOW FREQUENTLY HAVE YOU DRIVEN IN THE PAST 12 MONTHS?

1 At least once a day
2 At least once a week
3 At least once a month
4 At least once in the past 12 months
5 Never in the past 12 months

---

11. WHAT IS YOUR PRESENT EMPLOYMENT STATUS?

1 Retired
2 Disabled ▶ (GO TO Q 13a)
3 Unemployed
4 Employed full time ▶ (GO TO Q 13c)
5 Employed part time
6 Homemaker ▶ (GO TO Q 14)

13a. DO YOU FIND NO LONGER WORKING IN THE LABOUR FORCE:

[READ]

1 Very pleasant
2 Somewhat pleasant
3 Neither pleasant nor unpleasant
4 Somewhat unpleasant
5 Very unpleasant

13b. WAS STOPPING WORK OR RETIREMENT IMPOSED OR VOLUNTARY?

1 Imposed
2 Voluntary   AT WHAT AGE? |__|__| (age)

13c. OCCUPATION (CURRENT OR WHILE IN THE WORK FORCE)?

_____ |__|__|__|

---

14. WHAT WAS THE TOTAL INCOME IN YOUR HOUSEHOLD FOR THE LAST YEAR BEFORE TAXES AND OTHER DEDUCTIONS? INCLUDE INCOME FROM WAGES, SALARIES, INVESTMENTS, GRANTS, PENSIONS, ETC.

[SHOW CARD]

1 Less than $5,000
2 $5,000 to $9,999
3 $10,000 to $14,999
4 $15,000 to $19,999
5 $20,000 to $29,999
6 $30,000 or more

15. IN THE LAST 9 MONTHS HAVE ANY OF THE FOLLOWING AREAS CAUSED FINANCIAL DIFFICULTIES FOR YOU?

	Yes	No	N/A
1 Food	1	2	9
2 Accommodation	1	2	9
3 Clothing	1	2	9
4 Transportation	1	2	9
5 Medical	1	2	9
6 Dental	1	2	9
7 Recreation/entertainment	1	2	9
8 Alcohol	1	2	9
9 Prescription drugs	1	2	9

16. ARE YOU COVERED BY A PRIVATE OR GOVERNMENT DRUG PLAN?

1 Yes   2 No

INTERVIEWER:

THE NEXT FEW QUESTIONS CONCERN YOUR CURRENT PHYSICAL HEALTH. FOR EXAMPLE, PHYSICAL PROBLEMS YOU MAY EXPERIENCE, YOUR DIET, HOW OFTEN YOU SEE YOUR DOCTOR, ETC.

17. HOW WOULD YOU RATE YOUR OVERALL HEALTH - POOR, FAIR, GOOD OR EXCELLENT?

1 Poor   2 Fair   3 Good   4 Excellent

18. TO WHAT DEGREE DO HEALTH PROBLEMS IMPEDE ACTIVITIES - A GREAT DEAL, A LITTLE, OR NOT AT ALL?

1 A great deal   2 A little   3 Not at all

19. HOW MANY TIMES HAVE YOU SEEN A PHYSICIAN IN THE PAST 12 MONTHS?

|__|__|__| times

20. HOW MANY TIMES HAVE YOU SEEN A PUBLIC HEALTH NURSE IN THE PAST 3 MONTHS?

|__|__|__| times

21. HOW MANY DAYS HAVE YOU BEEN IN THE HOSPITAL DURING THE PAST 12 MONTHS?

|__|__|__| days

	Yes	No

22. HAVE YOU EVER SEEN A DOCTOR BECAUSE OF HEART TROUBLE?

23. HAVE YOU EVER SEEN A DOCTOR BECAUSE OF CIRCULATION PROBLEMS?

24. INTERVIEWER: IS RESPONDENT IN A WHEELCHAIR?

25. WHAT IS YOUR HEIGHT IN FEET? ____ feet |___| inches

26. WHAT IS YOUR WEIGHT? |___|___|___| lbs.

27. HOW OFTEN DO YOU EAT THE FOLLOWING MEALS - RARELY, SOMETIMES, OR OFTEN?

	Rarely	Sometimes	Often
Breakfast			
Lunch			
Evening meal			

---

28. ARE YOU ON A SPECIAL DIET SUGGESTED BY A DOCTOR?

1 No ➤ (GO TO Q 29)
2 Yes

➤ 28a. WHAT TYPE OF DIET?

28b. FOR WHAT REASON DID THE DOCTOR SUGGEST THIS DIET?

29. ON AVERAGE, HOW MANY CUPS OF TEA DO YOU DRINK IN A DAY?

|___|___|

30. ON AVERAGE, HOW MANY CUPS OF COFFEE DO YOU DRINK IN A DAY?

|___|___|

31. ON A DAILY BASIS, HOW OFTEN DO YOU EAT THE FOLLOWING FOODS - RARELY, AT LEAST ONCE A DAY, OR MORE THAN ONCE A DAY?

	Rarely	At Least Once a Day	More Than Once a Day
Meat or fish	1	2	3
Eggs	1	2	3
Milk or milk products	1	2	3
Fruit/vegetables	1	2	3

---

32. HAVE YOU EVER SMOKED CIGARETTES?

1 No ➤ (GO TO Q 33)
2 Yes

➤ 32a. DURING THE PAST 12 MONTHS HOW MANY CIGARETTES ON AVERAGE HAVE YOU SMOKED EACH DAY?

|___|___| cigarettes a day

77 I have not smoked in the past year
98 Less than one cigarette a day

(Note: 1 pack = 20 cigarettes)

33. WHAT TIME DO YOU USUALLY GO TO BED AT NIGHT?

time |___|___|___|___| 1 AM 2 PM

34. WHAT TIME DO YOU USUALLY WAKE UP IN THE MORNING?

time |___|___|___|___| 1 AM 2 PM

35. HOW MANY HOURS DO YOU TYPICALLY NAP DURING THE DAY?

|___|___| hours

---

36. HAVE YOU HAD TROUBLE SLEEPING OVER THE PAST MONTH?

1 No ➤ (GO TO Q 37)
2 Yes

➤ 36a. WHAT KIND OF TROUBLE?

|___|___|

37. DO YOU TAKE MEDICATION TO SLEEP?

1 No ➤ (GO TO Q 38)
2 Yes

➤ 37a. WHAT TYPE OF MEDICATION?

|___|___|

38. DO YOU HAVE ANY PROBLEMS WITH THE FOLLOWING?:

	Yes	No
1 Food allergies		
2 Drug allergies		
3 Other allergies		
4 Vision		
5 Hearing		
6 Teeth, gums		
7 Feet		
8 Back		
9 Stomach		
10 Legs or arms		
11 Skin		

39. DO YOU HAVE ANY MEDICAL, PHYSICAL OR MENTAL CONDITION THAT YOU FEEL ALCOHOL PLAYED A PART IN?

    1 No ➤ (GO TO Q 40)
    2 Yes

    ➤ 39a. WHAT CONDITION(S)?

    _____

    _____

40. DO YOU HAVE A PHYSICIAN WHO YOU SEE REGULARLY OR DO YOU USUALLY SEE PHYSICIANS WHO YOU DON'T KNOW OR WHO ARE UNFAMILIAR WITH YOUR HISTORY?

    1 Usually see own physician
    2 Usually see other physican
    3 Other _____ |__|__|

41. ARE YOU IN REGULAR CONTACT WITH A PHYSICIAN?

    1 Yes   2 No

42. WHEN DID YOU LAST SEE A PHYSICIAN?

    1 Today
    2 Yesterday
    3 3 to 6 days
    4 A week
    5 2 to 4 weeks
    6 1 to 2 months
    7 3 to 5 months
    8 6 months to a year
    9 More than a year

43. HOW MANY TIMES HAVE YOU SEEN A DENTIST IN THE PAST 3 YEARS?

    |__|__|

44. HAVE YOU BEEN INJURED BY ANY FALLS DURING THE PAST TWO YEARS?

    1 No ➤ (GO TO Q 45)
    2 Yes

    ➤ 44a. HOW MANY TIMES HAVE YOU INJURED YOURSELF FROM FALLING DURING THE PAST 2 YEARS?

    No. of times injured |__|__|

    44b. HOW MANY OF THESE FALLS, IF ANY, OCCURRED AFTER DRINKING?

    No. of falls |__|__|

INTERVIEWER:

> IN THE FOLLOWING QUESTIONS WE ARE INTERESTED IN WHETHER YOU
> HAVE EVER USED ALCOHOL, IF SO HOW OFTEN, WHEN AND WITH WHOM
> YOU USUALLY DRINK AND WHETHER YOU EXPERIENCE ANY DIFFICULTIES
> REGARDING YOUR USE OF ALCOHOL.

45. HAVE YOU EVER HAD A DRINK OF ALCOHOL - THAT IS, BEER, WINE OR LIQUOR?

    1 No ➤ (GO TO Q 72)
    2 Yes

46. HOW OFTEN HAVE YOU HAD A DRINK OF ALCOHOL IN THE LAST 12 MONTHS?

    1 Never during the past year ➤ (GO TO Q 68)

    1 More than once a day
    2 About once a day
    3 About 2 to 5 times a week
    4 About once a week
    5 About 2 to 3 times a month
    6 About once a month
    7 Less than once a month

47. HOW OFTEN HAVE YOU HAD A DRINK OF BEER OR ALE IN THE LAST 12 MONTHS?

    1 Never drank beer during past year ➤ (GO TO Q 49)

    1 More than once a day
    2 About once a day
    3 About 2 to 5 times a week
    4 About once a week
    5 About 2 to 3 times a month
    6 About once a month
    7 Less than once a month

48. ON THOSE DAYS YOU DRINK BEER, ABOUT HOW MUCH DO YOU USUALLY DRINK?

    |__|__| bottles

49. HOW OFTEN HAVE YOU HAD A DRINK OF <u>LIQUOR OR LIQUEUR</u> IN THE <u>LAST 12 MONTHS</u>?

   0 Never drank liquor during past year ▶ (GO TO Q 51)

   1 More than once a day
   2 About once a day
   3 About 2 to 5 times a week
   4 About once a week
   5 About 2 to 3 times a month
   6 About once a month
   7 Less than once a month

50. ON THOSE DAYS YOU DRINK <u>LIQUOR OR LIQUEUR</u>, ABOUT HOW MUCH DO YOU USUALLY DRINK?

   1 Less than one shot.........less than 1 oz.
   2 About one standard shot....1 1/2 oz.
   3 2 shots (a "double").......3 oz.
   4 3 to 4 shots...............4 to 6 oz.
   5 5 to 6 shots...............7 to 9 oz. (1/3 of 26 oz. bot1)
   6 7 to 9 shots...............10 or more oz.(1/2 of 26 oz. bot1)

51. HOW OFTEN HAVE YOU HAD A DRINK OF <u>WINE</u> IN THE <u>LAST 12 MONTHS</u>?

   0 Never drank wine during past year ▶ (GO TO Q 53)

   1 More than once a day
   2 About once a day
   3 About 2 to 5 times a week
   4 About once a week
   5 About 2 to 3 times a month
   6 About once a month
   7 Less than once a month

52. ON THOSE DAYS THAT YOU DRINK <u>WINE</u>, ABOUT HOW MUCH DO YOU USUALLY DRINK?

   1 A small glass...........3 oz.
   2 1 glass................5 oz.
   3 2 glasses..............10 oz.
   4 3 to 4 glasses.........1/2 26 oz. bottle
   5 5 to 6 glasses.........26 oz.
   6 7 or more glasses......1 litre or more

53. ABOUT HOW OFTEN DURING THE <u>LAST 12 MONTHS</u> WOULD YOU SAY YOU HAD 5 OR MORE DRINKS AT THE SAME SITTING OR OCCASION?

   1 About every day
   2 3 to 4 times a week
   3 Once or twice a week
   4 2 or 3 times a month
   5 About once a month
   6 6 to 11 times a year
   7 1 to 5 times a year
   8 Never in the past 12 months

54. ON WHICH DAY OF THE WEEK DO YOU TEND TO DRINK ALCOHOL MORE OFTEN?

   1 Monday
   2 Tuesday
   3 Wednesday
   4 Thursday
   5 Friday
   6 Saturday
   7 Sunday
   8 About equal
   9 Other combination

55. WHERE DO YOU TYPICALLY DRINK ALCOHOL?

   1 At home
   2 At a friend's
   3 At a restaurant
   4 At a bar
   5 Other _____ |__|__|

56. DO YOU EVER DRINK ALONE?

   1 No ▶ (GO TO Q 57)
   2 Yes

      ▶ 56a. HOW OFTEN DO YOU USUALLY DRINK ALONE?

           1 At least once a day
           2 About 6 times a week
           3 About 4 to 5 times a week
           4 About 2 to 3 times a week
           5 About once a week
           6 About once a month or less often

57. WHEN YOU DRINK, WHAT TIME OF DAY DO YOU USUALLY HAVE YOUR FIRST DRINK?

   |__|__|__|__| time   1 AM   2 PM

58. HOW OFTEN IN THE LAST 12 MONTHS HAVE YOU HAD A DRINK OF ALCOHOL
    - THAT IS, BEER, WINE, OR LIQUOR, - BEFORE NOON?

    1 About every day
    2 3 to 4 times a week
    3 1 or 2 times a week
    4 2 or 3 times a month
    5 About once a month
    6 6 to 11 times a year
    7 1 to 5 times a year
    8 Never in the past 12 months

59. WHEN WAS THE LAST TIME YOU HAD A DRINK OF ALCOHOL?

    1 Today
    2 Yesterday
    3 3 to 6 days
    4 A week
    5 2 to 4 weeks
    6 1 to 2 months
    7 3 to 5 months
    8 6 months to a year
    9 More than a year

60. DO YOU CURRENTLY DRINK LESS, THE SAME, OR MORE THAN YOU DID
    WHEN YOU WERE?:

	Less	Same	More
Aged 46-60 yrs	1	2	3
Aged 40-45 yrs	1	2	3
Aged <40 yrs	1	2	3

61. HAVE YOU EVER ABSTAINED FROM ALCOHOL - THAT IS, STOPPED
    DRINKING - FOR A PERIOD OF TIME?

    1 No ▶ (GO TO Q 62)
    2 Yes

    61a. FOR HOW LONG? |__|__|__| months

    61b. WHY?

    _____ |__|__|

    _____

23

24

62. DO YOU CONSIDER YOURSELF AT THE PRESENT TIME TO BE:

    [READ]

    1 A very light drinker
    2 A fairly light drinker
    3 An average drinker
    4 A fairly heavy drinker
    5 A very heavy drinker?

63. WERE YOU EVER A HEAVY DRINKER?

    1 Yes   2 No

64. WHEN YOU DRINK ALCOHOL, HOW OFTEN IS IT FOR ANY OF THE
    FOLLOWING REASONS. - OFTEN, SOMETIMES, RARELY OR NEVER?

		Often	Sometimes	Rarely	Never	Dont Know
1	To help you sleep	1	2	3	4	5
2	To relieve tension or anxiety	1	2	3	4	5
3	To relieve pain	1	2	3	4	5
4	To be sociable	1	2	3	4	5
5	To help you relax	1	2	3	4	5
6	To block out depressing thoughts, cheer you up	1	2	3	4	5
7	Because you like the taste	1	2	3	4	5
8	To give you self-confidence	1	2	3	4	5
9	To block out loneliness	1	2	3	4	5
10	To pass the time	1	2	3	4	5
11	To complement a meal	1	2	3	4	5

65. SOME PEOPLE WORRY ABOUT THEIR DRINKING EVEN THOUGH THEY MAY NOT
    BE REALLY HEAVY DRINKERS. HOW MUCH DO YOU WORRY ABOUT YOUR
    DRINKING?

    [READ]

    1 Not at all ▶ (GO TO Q 66)
    2 Most of the time
    3 A lot
    4 Some
    5 A little

        65a. WHY DO YOU WORRY ABOUT YOUR DRINKING?

        _____

        _____ |__|__|

66. WOULD YOU SAY THAT ALCOHOL HAS MADE THE FOLLOWING AREAS OF YOUR
    LIFE GENERALLY BETTER, GENERALLY WORSE, OR NO DIFFERENT?

	Better	Worse	No Difference	Dont Know
Leisure activities	1	2	3	4
Financial situation	1	2	3	4
Your life overall	1	2	3	4

	Yes	No
67. HAVE YOU EVER FELT YOU OUGHT TO CUT DOWN ON YOUR DRINKING?	1	2
68. HAVE PEOPLE ANNOYED YOU BY CRITICIZING YOUR DRINKING?	1	2

69. HAVE YOU EVER FELT BAD OR GUILTY ABOUT YOUR
     DRINKING? | 1 | 2 |

70. HAVE YOU EVER HAD A DRINK FIRST THING IN THE
     MORNING TO STEADY YOUR NERVES AND GET RID OF
     A HANGOVER? (EYE-OPENER) | 1 | 2 |

71. HAVE YOU EVER RECEIVED ANY KIND OF TREATMENT BECAUSE OF
     ADDICTION OR PROBLEMS WITH DRUGS OR ALCOHOL?

     1 No   ▶   (GO TO Q 72)
     _2 Yes

                ▶   71a. WHAT KIND OF TREATMENT HAVE YOU RECEIVED?

                        CHECK ALL THAT APPLY

                        |__| Detoxication
                        |__| Assessment/referral
                        |__| Residential-hospital inpatient
                        |__| Residential-community (halfway house)
                        |__| Nonresidential hospital outpatient
                        |__| Nonresidential community counselling
                        |__| Self-help group
                        |__| Drug therapy
                        |__| Other treatment

ASK ALL

72. HAVE YOU EVER KNOWN ANYONE WHO HAS HAD A DRINKING PROBLEM?

     1 No   ▶   (GO TO Q 73)
     _2 Yes

                ▶   72a. WHAT IS THE RELATIONSHIP OF THAT PERSON OR
                        THOSE PEOPLE TO YOU?

                        CHECK ALL THAT APPLY

                        |__| Mother |__| Son
                        |__| Father |__| Daughter
                        |__| Sister |__| Other relative
                        |__| Brother |__| Friend/Acquaintance
                        |__| Spouse

73. THINK OF YOUR THREE CLOSEST FRIENDS (DON'T MENTION THEIR
     NAMES). AS FAR AS YOU KNOW, HOW MANY OF THEM USE ALCOHOL?

     3   2   1   0(None)   8(Don't Know)   (GO TO Q 75)

74. THINKING ABOUT THESE SAME THREE FRIENDS, AS FAR AS YOU KNOW,
     HOW MANY OF THEM HAVE HAD 5 OR MORE DRINKS OF ALCOHOL ON THE
     SAME OCCASION DURING THE PAST 12 MONTHS?

     3   2   1   0(None)   8(Don't Know)

75. HOW SERIOUS A PROBLEM DO YOU THINK ALCOHOLISM IS COMPARED TO
     OTHER PUBLIC HEALTH PROBLEMS IN THIS COUNTRY - NOT AT ALL
     SERIOUS, SLIGHTLY SERIOUS, FAIRLY SERIOUS OR VERY SERIOUS?

     1 Not at all serious
     2 Slightly serious
     3 Fairly serious
     4 Very serious
     8 Don't know

76. ALL THINGS CONSIDERED, DO YOU THINK THAT DRINKING ALCOHOLIC
     BEVERAGES DOES PEOPLE MORE GOOD THAN HARM, OR MORE HARM THAN
     GOOD?

     1 More good than harm
     2 More harm than good
     3 Other_____

INTERVIEWER:

     NOW, IN THE NEXT FEW QUESTIONS WE ARE INTERESTED IN YOUR
     PARTICIPATION IN RECREATIONAL ACTIVITIES, WHETHER YOU FEEL
     LONELY, AND YOUR FEELINGS ABOUT LIFE IN GENERAL

77. HOW FREQUENTLY DO YOU PARTICIPATE IN THE FOLLOWING ACTIVITIES -
     RARELY, SOMETIMES OR OFTEN?

	Rarely	Sometimes	Often
1 Recreational activities/ hobbies	1	2	3
2 Clubs, fraternities, community organizations	1	2	3
3 Socializing with friends	1	2	3
4 Doing volunteer work	1	2	3

78. DO YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE
     WITH THE FOLLOWING STATEMENTS?

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
1 I do not have enough friends	1	2	3	4	8
2 I do not have enough to keep me busy	1	2	3	4	8
3 I do not feel needed	1	2	3	4	8

79. FOR YOURSELF DO YOU CONSIDER LONELINESS TO BE:

     READ:

     1 Not a problem
     2 A somewhat serious problem
     3 A very serious problem

10. HOW OFTEN DO YOU EXPERIENCE FEELINGS LIKE THE FOLLOWING - OFTEN, SOMETIMES OR RARELY?

	Often	Sometimes	Rarely
1 I feel lonely	1	2	3
2 I feel that I have as many close relationships as I want	1	2	3
3 I feel emotionally satisfied in my relationships with people	1	2	3

11. DO YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE WITH THE FOLLOWING STATEMENTS?

	Strongly Agree	Agree	Dis-agree	Strongly Disagree	Dont know
1 Becoming a success is a matter of hard work; luck has nothing to do with it	1	2	3	4	5
2 What happens to me is my own doing	1	2	3	4	5
3 Most people don't realize the extent to which their lives are controlled by accidental happenings	1	2	3	4	5
4 Many times I feel that I have little influence over the things that happen to me	1	2	3	4	5

12. DO YOU HAVE ANYONE WHO YOU FEEL YOU CAN CONFIDE IN?

1 Yes   2 No

13. IS THERE ANYONE YOU COULD DEPEND UPON IF YOU BECAME ILL FOR A SHORT PERIOD OF TIME?

1 Yes   2 No

14. HOW FREQUENTLY DO YOU SPEAK WITH RELATIVES ON THE TELEPHONE - NEVER, RARELY, SOMETIMES, OR OFTEN?

	Never	Rarely	Sometimes	Often
	1	2	3	4

15. HOW OFTEN DO YOU VISIT OR ARE YOU VISITED BY RELATIVES - NEVER, RARELY, SOMETIMES, OFTEN?

	Never	Rarely	Sometimes	Often
	1	2	3	4

16. DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS?

	Agree	Disagree	Dont know
1 As I look on my life I am fairly well satisfied	1	2	3
2 I would not change my past life even if I could	1	2	3
3 I have got what I expected out of life	1	2	3
4 I have got more of the breaks in life	1	2	3
5 I am just as happy as when I was younger	1	2	3
6 My life could be happier	1	2	3
7 These are the best years of my life	1	2	3

17. HOW OFTEN DO YOU EXPERIENCE THE FOLLOWING - OFTEN, SOMETIMES OR RARELY?

	Often	Sometimes	Rarely
1 I feel excited	1	2	3
2 I feel pleased	1	2	3
3 I feel restless	1	2	3
4 I feel on top of the world	1	2	3
5 I feel very lonely	1	2	3
6 I feel that things are going my way	1	2	3
7 I feel bored	1	2	3
8 I feel depressed	1	2	3

INTERVIEWER:

> THIS NEXT SECTION OF THE INTERVIEW CONCERNS YOUR USE OF DRUGS OTHER THAN ALCOHOL TAKEN FOR MEDICAL REASONS. THERE ARE MANY DIFFERENT DRUGS AVAILABLE NOWADAYS. SINCE WE WANT TO OBTAIN ACCURATE INFORMATION, WHERE POSSIBLE, WE WOULD LIKE TO SEE YOUR CONTAINERS SO WE CAN RECORD THE ACTUAL DRUG NAME.

18. DURING THE PAST 12 MONTHS HAVE YOU USED THE FOLLOWING MEDICATION?

INTERVIEWER:

> ASK FOR PRESCRIPTION OR DRUG BOTTLE FOR INFORMATION

		A	B	C	D
1. Pain relievers, such as aspirin, aceta- minophen	1 Yes 2 No ▼ [GO TO Q.2]	Name of drug on label	Is this drug by prescription?	Are you following the prescription exactly, taking less or taking more?	
		DRUG 1 _____ |__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more	
		DRUG 2 _____ |__|__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more	

E	F	G
How many tablets do you take each day? |__|__| |__|__|__| mgs	Have you used this medicine today or in the last few days? 1 Yes 2 No	How frequently have you used this medicine during the past 12 months? 1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know
|__|__| |__|__|__| mgs	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know

		A	B	C	D
2. Tran- quillisers	1 Yes 2 No ▼ [GO TO Q.3]	Name of drug on label	Is this drug by prescription?	Are you following the prescription exactly, taking less or taking more?	
		DRUG 1 _____ |__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more	
		DRUG 2 _____ |__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more	

E	F	G
How many tablets do you take each day? |__|__| |__|__|__| mgs	Have you used this medicine today or in the last few days? 1 Yes 2 No	How frequently have you used this medicine during the past 12 months? 1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know
|__|__| |__|__|__| mgs	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know

A	B	C	D
3. Medicine to help you sleep	1 Yes 2 No ▼ [GO TO Q.4]	Name of drug on label	Is this drug by prescription?	Are you following the prescription exactly, taking less or taking more?
		DRUG 1 _____ |__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more
		DRUG 2 _____ |__|__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more

E	F	G
How many tablets do you take each day?	Have you used this medicine today or in the last few days?	How frequently have you used this medicine during the past 12 months?
|__|__| |__|__|__| mgm	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know
|__|__| |__|__|__| mgm	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know

A	B	C	D
4. Medicine for heart or blood pressure	1 Yes 2 No ▼ [GO TO Q.5]	Name of drug on label	Is this drug by prescription?	Are you following the prescription exactly, taking less or taking more?
		DRUG 1 _____ |__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more
		DRUG 2 _____ |__|__|	1 Yes 2 No ▼ [GO TO E]	1 Exactly 2 Taking less 3 Taking more

E	F	G
How many tablets do you take each day?	Have you used this medicine today or in the last few days?	How frequently have you used this medicine during the past 12 months?
|__|__| |__|__|__| mgm	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know
|__|__| |__|__|__| mgm	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know

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	A	B	C	D
5. Cough or cold remedies (especially cough syrups)	1 Yes 2 No ▼ (GO TO 6?)	Name of drug on label	Is this drug by prescription?	Are you following the prescription exactly, taking less or taking more?
		DRUG 1 _____ |_|_|	1 Yes 2 No ▼ (GO TO E)	1 Exactly 2 Taking less 3 Taking more
		DRUG 2 _____ |_|_|	1 Yes 2 No ▼ (GO TO E)	1 Exactly 2 Taking less 3 Taking more

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E	F	G
How many tablets or teaspoons do you take each day?	Have you used this medicine today or in the last few days?	How frequently have you used this medicine during the past 12 months?
|_|_| |_|_|_| mgm	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know
|_|_| |_|_|_| mgm	1 Yes 2 No	1 More than once a day 2 About every day 3 About 2 to 5 times a week 4 About once a week 5 About 2 to 3 times a month 6 About once a month 7 Less than once a month 8 Don't know

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89. DO YOU THINK THAT CUTTING DOWN ON ANY PARTICULAR DRUG OR ALCOHOL WOULD HELP YOUR:

	No	Yes	If Yes, what drug?	
1 Overall health	1	2		|_|_|
2 Walking ability	1	2		|_|_|
3 Moods	1	2		|_|_|
4 Memory	1	2		|_|_|
5 Ability to think	1	2		|_|_|
6 Sleep	1	2		|_|_|

90. OTHER THAN ALCOHOL, HAVE YOU EVER KNOWN ANYONE WHO HAS HAD A DRUG PROBLEM?

1 No ➤ (GO TO Q 91)

2 Yes

➤ 90a. IF YES, WHO? [CHECK ALL THAT APPLY]

\|_\| Mother   \|_\| Son
\|_\| Father   \|_\| Daughter
\|_\| Sister   \|_\| Other relative
\|_\| Brother \|_\| Friend/Acquaintance
\|_\| Spouse

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IN THE FOLLOWING QUESTIONS WE WILL BE REFERRING TO DRUGS USED FOR BOTH MEDICAL AND NON-MEDICAL REASONS

	Yes	No
91. HAVE YOU USED DRUGS OTHER THAN THOSE REQUIRED FOR MEDICAL REASONS?	1	2
92. ARE YOU ALWAYS ABLE TO STOP USING DRUGS WHEN YOU WANT TO?	1	2
93. DO YOU EVER FEEL BAD ABOUT YOUR DRUG USE?	1	2
94. HAVE YOU EVER GONE TO ANYONE FOR HELP WITH A DRUG PROBLEM?	1	2
95. HAVE YOU EVER BEEN IN THE HOSPITAL FOR MEDICAL PROBLEMS RELATED TO YOUR DRUG USE?	1	2

96. COMPARED TO THE PREVIOUS YEAR, WOULD YOU SAY THAT YOUR PRESENT SITUATION HAS CHANGED FOR THE BETTER, THE WORSE, OR NOT AT ALL IN THE FOLLOWING AREAS?

	Better	Worse	No Change	Dont Know
1 Financial well-being	1	2	3	4
2 Amount of energy	1	2	3	4
3 Eating	1	2	3	4
4 Getting Out	1	2	3	4
5 Feeling Happy	1	2	3	4
6 Following the news	1	2	3	4
7 Dressing up	1	2	3	4

97. HAVE ANY OF THE FOLLOWING EVENTS OCCURRED IN THE PAST 12 MONTHS?

	Yes	No	NA
1 Spouse died	1	2	3
2 Family member other than spouse died	1	2	3
3 Moved to a worse residence or neighbourhood	1	2	3
4 Been assaulted or robbed	1	2	3
5 Lost drivers licence	1	2	3
6 Suffered a financial loss or loss of property	1	2	3
7 Close friend died	1	2	3
8 Physical illness	1	2	3
9 Injury	1	2	3

98. NOW THAT WE ARE ALMOST THROUGH WITH THIS INTERVIEW, I WOULD LIKE TO HEAR YOUR FEELINGS ABOUT IT. OVERALL, HOW ENJOYABLE WAS THIS INTERVIEW?

_____

99. OVERALL, DO YOU THINK THE QUESTIONS WOULD MAKE MOST PEOPLE VERY UNEASY, MODERATELY UNEASY, SLIGHTLY UNEASY, OR NOT AT ALL UNEASY?

1 Very uneasy
2 Moderately uneasy
3 Slightly uneasy
4 Not at all uneasy
5. Dont know

100. WHICH QUESTIONS, IF ANY, WERE UNCLEAR OR HARD TO UNDERSTAND?

None

_____

101. WHICH QUESTIONS, IF ANY, WERE TOO PERSONAL?

None

_____

END OF INTERVIEW

INTERVIEWER

FILL IN ITEMS BELOW IMMEDIATELY AFTER LEAVING RESPONDENT

TOTAL LENGTH OF INTERVIEW |__|__|__| minutes

DATE OF INTERVIEW |__|__| |__|__| 19|__|__|
                   month   day   year

INTERVIEWER'S INITIALS |__|__|

11 HOW MANY OTHERS WERE PRESENT DURING THE INTERVIEW? |__|

12 NUMBER OF CALL-BACKS MADE |__|__|

13 HOW WOULD YOU RATE THE RESPONDENT'S OVERALL LEVEL OF COMPREHENSION?

1 Excellent
2 Good
3 Fair
4 Poor
5 Dont know

14 RESPONDENT'S INTEREST IN PROVIDING USEFUL ANSWERS WAS:

1 Excellent
2 Good
3 Fair
4 Poor
5 Dont know

15 OVERALL, WOULD YOU SAY THAT THE QUESTIONS MADE THE RESPONDENT FEEL VERY UNEASY, MODERATELY UNEASY, SLIGHTLY UNEASY OR NOT AT ALL UNEASY?

1 Very uneasy
2 Moderately uneasy
3 Slightly Uneasy
4 Not at all uneasy

16 OTHER COMMENTS:

17   PLEASE DESCRIBE ANY AMBIGUOUS OR CONFLICTING SITUATIONS THAT
     YOU WANT CODING TO KNOW ABOUT

     None   _____
             _____
             _____
     _____

18   WAS THERE ANY SERIOUS PROBLEMS WITH THE INTERVIEW, SUCH AS
     RESPONDENT'S DIFFICULTY IN HEARING OR UNDERSTANDING THE
     QUESTION, ETC., WHICH AFFECTED THE QUALITY OF THE INTERVIEW?

     None   _____
             _____
             _____
     _____

```
FOR OFFICE USE ONLY

Building Code  |___|
Suite Code     |___|
Location         |___|
```

Appendix B

Variable Measurement

Physical Health   6 items: higher score represents greater health

                       1/How would you rate your overall health
                       2/Degree to which health impedes acts
                       3/Times seen MD past 12 months
                       4/Days in hospital past 12 months
                       5/Seen MD for heart trouble
                       6/Seen MD for circulation problems

                       Alpha reliability=.64
                       Mean=5.62
                       SD=2.03
                       Range=0-10

Social Activity   4 items: higher score represents greater activity

                       1/Participates recreational activities
                       2/Participates clubs, community organizations
                       3/Socializes with friends
                       4/Volunteer work

                       Alpha reliability=.62
                       Mean=3.08
                       SD=2.20
                       Range=0-8

Social Fulfilment   3 items: higher score represents less fulfillment

                       1/Has enough friends
                       2/Keeps busy
                       3/Feels needed

                       Alpha reliability=.59
                       Mean=5.47
                       SD=1.21
                       Range=1-9

Social Support   4 items: higher score represents greater support

                      1/Someone to confide in
                      2/Someone to depend on if ill
                      3/How often speaks with relatives
                      4/How often sees relatives

                      Alpha reliability=.67
                      Mean=6.55
                      SD=1.94
                      Range=0-9

Loneliness   4 items: higher score represents less loneliness

                      1/Feels lonely
                      2/Enough close friends
                      3/Emotionally satisfied

                      Alpha reliability=52
                      Mean=4.42
                      SD=1.49
                      Range=0-6

Mastery   4 items: higher score represents greater mastery

                      1/Success by hard work
                      2/Happenings own doing
                      3/Lives controlled by fate
                      4/Little influence

                      Alpha=.31
                      Mean=5.63
                      SD=1.54
                      Range=0-11

Negative Life-Events 9 items: higher score represents greater stress

                      1/Spouse died
                      2/Family member died
                      3/Moved to poor residence
                      4/Been assaulted/robbed
                      5/Lost drivers licence
                      6/Sufferd financial loss
                      7/Close friend died
                      8/Physical illness
                      9/Injury

                      Alpha reliability=.27
                      Mean=1.02
                      SD=1.05
                      Range=0-5

Subjective Well-being
    Congruence   4 items: higher score represents less congruence

                           1/Satisfied with life
                           2/Not change past life
                           3/Got what expected in life
                           4/Got breaks in life

                           Alpha reliability=.25
                           Mean=1.54
                           SD=2.20
                           Range=0-14

    Happiness   4 items: higher score represents less happiness

                           1/Happy as when younger
                           2/Life could be happier
                           3/Best years of life

                           Alpha reliability=.30
                           Mean=1.71
                           SD=1.97
                           Range=0-15

    Positive Affect   4 items: higher score represents less positve affect

                           1/Feel excited
                           2/Feel pleased
                           3/Feel on top of world
                           4/Feel things go my way

                           Alpha reliability=.52
                           Mean=4.27
                           SD=2.06
                           Range=0-8

    Negative Affect   4 items: higher score represents greater negative

                           1/Feel restless
                           2/Feel lonley
                           3/Feel bored
                           4/Feel depressed

                           Alpha reliability=.66
                           Mean=1.95
                           SD=2.06
                           Range=0-8

Alcohol Problems   4 items: higher score represents greater problems
(CAGE)

                        1/Should cut down
                        2/Others annoyed
                        3/Felt guilty
                        4/Morning drink

                        Alpha reliability=.70
                        Mean=.33
                        SD=.73
                        Range=0-4

Drug Problems   4 items: higher score represents greater problems

                        1/Nonmedical drug use
                        2/Able to stop
                        3/Feel bad about use
                        4/Sought help
                        5/Been in hospital

                        Alpha reliability=.41
                        Mean=.36
                        SD=.62
                        Range=0-5

Appendix C

Approximate Sampling Errors

Percentages near:	Total (n=349)	Males (n=109)	Sample Size Females (n=239)	60-65 (n=58)	66-70 (n=57)	71-75 (n=79)	76+ (n=153)
50	5.2	9.3	6.3	12.7	12.9	10.9	7.8
30 or 70	4.8	8.5	5.8	11.7	11.8	10.0	7.2
20 or 80	4.2	7.4	5.0	10.2	10.3	8.7	6.3
10 or 90	3.1	5.6	3.8	7.6	7.7	6.6	4.7
5 or 95	2.3	4.1	2.7	5.6	5.6	4.8	3.4

Note: entries reflect 95% confidence intervals

Appendix D

Test-Retest Reliability

Test-Retest Reliability
(n=43)

Variable	% Consistent	Reliability Coefficient
Demographics		
Year of birth	99	.99
Country of birth*	100	1.00
Year arrived	91	.99
Physical Health		
Overall health	49	.77
Degree of health impedes	62	.79
Times seen physican	39	.93
Days in hospital	63	.92
Seen MD for heart*	85	.71
Seen MD for circulation*	80	.55
Social Activities		
Recreation	56	.66
Clubs, organizations	66	.71
Friends	24	.68
Volunteer work	31	.76
Alcohol		
Ever drank*	90	.66
Frequency of use	53	.95
Five+ drinks	85	.84
Alcohol Problems		
Cut down*	78	.28
Annoyed others*	84	.29
Guilty*	91	.60
Morning drink*	91	.53
Drug Use		
Ever smoke*	95	.89
Pain releivers*	75	.30
Tranquillizers*	90	.75
Sleeping pills*	85	.63
Heart/blood*	90	.80
Drug Problems		
Stop use*	47	.07
Feel bad*	82	.27
Gone for help*	95	.02
Hospital*	95	.64
Mean	75.2	.65
Median	84.5	.70

* indicates dichotomous (yes/no) responses.

7. Notes

7. Notes

1. The minimum projected increase is based on the presumption that the fertility rate will increase from its 1983 level of 1.7 births to a level of 2.1 by 1996. The maximum projected increase is, on the other hand. based on the presumption that the fertility rate will decrease to 1.4 by 1996. In either case, it is clear that the proportion of people aged 65 and older will increase significantly.

2. The Canada Health Survey (CHS) is a nationwide survey of noninstitutionalized Canadians. The survey, a joint venture between Statistics Canada and Health and Welfare Canada, surveyed 12,000 households in 1978–1979 (Health and Welfare Canada, 1981).

3. Mixed units are buildings that are not restricted to seniors. In total, exclusions represent 3788 suites from 15 buildings. The sampling frame employed for this study was Seniors Apartments in Metropolitan Toronto (Community Information Centre of Metropolitan Toronto).

4. Selecting every individual within a household is desirable when there is seldom more than one member per household (Kish, 1965). Such is the case in our population where only about 9% of units are inhabited by couples. In total, 19% of respondents were interviewed in the presence of others.

5. Because the product of the probabilities of selection for each stage equals the overall sampling fraction, estimates are self-weighted (i.e., they require no weighting).

6. Interviewers were capable of translating Chinese dialects, East Indian dialects and Portuguese. A brief examination of interviewer differences in reporting by respondents showed that of some 62 items in this report, 17 showed significant response differences among interviewers. It is likely, however, that many of these differences are likely due to ethnic and building differences rather than interviewer differences. Future multivariate analyses will examine this issue more closely.

7. The CAGE scale consists of the summation of positive responses to the four items: (1) Have you ever felt you ought to cut down on your drinking?; (2) Have people annoyed you by criticizing your drinking?; (3) Have you ever felt bad or guilty about your drinking?; and (4) Have you ever had a drink first thing in the morning to steady your nerves and get rid of a hangover?. Two or more positive responses suggest evidence of alcohol abuse that warrants investigation (Mayfield et al., 1974). The reliability coefficient of this scale was .70.

8. Comparisons between weighted and unweighted estimates showed little difference. We have retained, however, the weighted estimates.

9. Total ounces of absolute alcohol consumed was measures as follows:

$$\text{Absolute Alcohol (oz.)} = F_{beer} (Q_{beer} \cdot .05)$$
$$+ F_{wine} (Q_{wine} \cdot .14)$$
$$+ F_{liq} (Q_{liq} \cdot .40).$$

where F=frequency of use during past week,
 Q=typical quantity consumed (oz.).

10. Although the mortality rate of heart disease is higher among males than
    females, the Canada Health Survey found that females were more likely to
    report hypertension, a condition for the prescription of heart and blood
    pressure medicine, as a health problem than males (36% versus 20%)(CHS:
    Table 57).

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